



Learning with Purpose

The Division of Online  
and Continuing Education  
<http://continuinged.uml.edu>

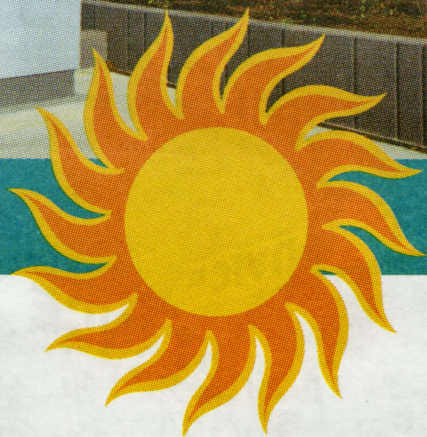
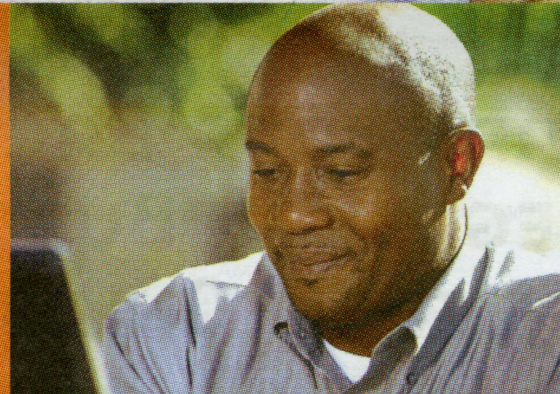
Diane

2016  
summer

# Make an investment that will *last a lifetime.*



Pursue Your Degree  
On Campus  
or Online



**Summer classes** begin May 16, 2016... sign up today!

## Undergraduate & Graduate Courses

### Announcing New Online Programs

- Online Doctorate in Education  
Plus One Week Residency
- Online Marketing Concentration (MBA)

- 3 Signature Degree Programs
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University of Massachusetts Lowell  
The Division of Online and Continuing Education  
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## Make an Investment that Will Last a Lifetime:

Pursue Your Degree Online or On-Campus at UMass Lowell

**S**ummer is a great time to accelerate your progress towards a degree, or to catch up on a required course. At UMass Lowell, our prestigious online degree programs continue to receive national recognition, as demonstrated by the rankings below.

We offer affordable, highly interactive courses on campus or online, specifically designed for degrees or certificates, and specially scheduled with convenient times and locations.

If you are a working professional or a traditional day student, you will find our courses stimulating and interesting. For instance, UMass Lowell has once again significantly expanded our summer offerings for 2016, including **Sociology of Mass Media, Applied Research Design, Latin American Philosophy, Children's Literature, Engineering for Teachers, Domestic Terrorism and Extremism, Exercise Physiology 1, and Selected Authors: William Faulkner and many more.**

This Summer, we invite you to invest in your education. Pursue your degree or certificate, online or on campus, from one of the largest continuing education providers in the Northeast.

As Spring is fast approaching, we hope you will take the time to enjoy our Summer bulletin, because it is filled with hundreds of new opportunities!

Highlights of UMass Lowell's recent U.S. News & World Report national rankings:



## EARN YOUR BACHELOR'S DEGREE IN BUSINESS ENTIRELY ONLINE!

UMass Lowell's **Robert J. Manning School of Business' Bachelor of Science Degree in Business Administration** is now available entirely online through the Division of Online and Continuing Education.

**Summer 2016 Online Marketing Courses that can be counted towards the Bachelor's Degree in Business include:**

- MKTG.2010 Marketing Principles
- MKTG.2100 Professional Communications
- MKTG.3030 Sales and Customer Relations
- MKTG.4020 Buyer Behavior
- MKTG.4070 Retailing
- MKTG.4120 Global Marketing

**New Online Management Courses for the BSBA Degree this Spring include:**

- BUSI.3800 Business Ethics
- MGMT.4900 Strategic Management

UMass Lowell's Robert J. Manning School of Business is fully accredited by the Association to Advance Collegiate Schools of Business (AACSB) International.

For additional information, visit: <http://continuinged.uml.edu/degrees/bsba.cfm>



**"It was really important to me to find a university with a reputable online program. UMass Lowell really stood out – not only for its quality and price – but also for the depth of courses they offer."**

Aidah Wanjiku, Student  
Bachelor's Degree in Business  
Administration

## Earn a Master's Degree in Information Technology Online!

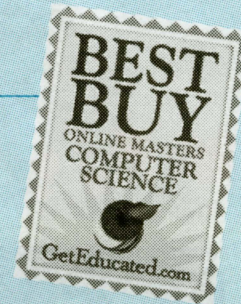
**T**his 10-course contemporary degree is technically focused and features cutting-edge knowledge content critical to the workforce needs of the Commonwealth.

Offered fully online, this degree provides a pathway for students who have completed a Bachelor's in Information Technology and for working professionals who want to pursue advanced graduate studies in Information Technology.

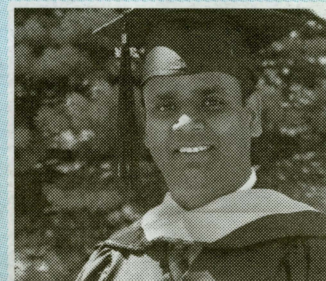
**The following graduate IT courses will be available this semester:**

- MSIT.5110-031 Network and System Administration
- MSIT.5190-031 Virtual Systems
- MSIT.5310-031 Project Management
- MSIT.5320-031 Managing Large Data Sets
- MSIT.5450-031 Designing and Building a Cybersecurity Program
- MSIT.5620-031 Digital Forensics

For further information, please visit  
<http://continuinged.uml.edu/degrees/msit.cfm>



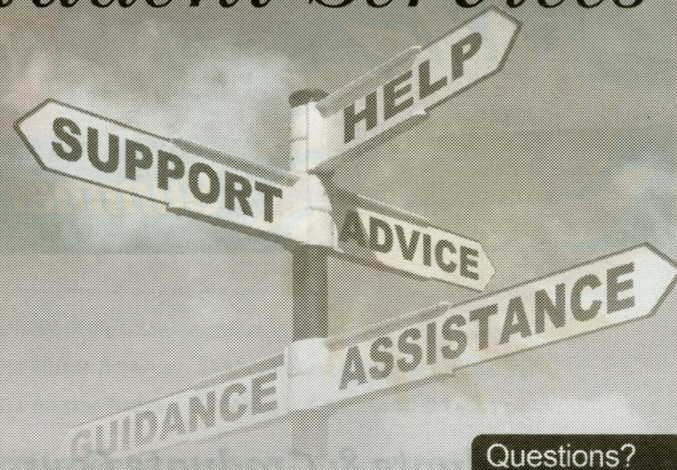
**Ranked a Best Buy Online Master's Degree by GetEducated.com**



**"I had looked into a number of graduate programs, but UMass Lowell had the best selection of graduate-level IT courses and the tuition was more affordable. I started out taking a few of the courses like Digital Forensics and Cloud Computing, and found that what I learned was very practical. I was able to apply that knowledge right away in my job. After a couple of semesters, I decided to pursue my Master's Degree."**

Mark Willard  
M.S. in Information Technology, '14

## Personalized Student Services



**Questions?**  
Chat with an Advisor!  
[Chat Now](#)

### New! Live Chat Advising

Do you have a quick question but don't feel like picking up the phone? Visit <http://continuinged.uml.edu> to chat live with one of our advisors, available Monday through Friday during regular office hours.

### Schedule an Advising Appointment

To schedule an appointment with an academic advisor, use our online self-service scheduling system found at: <http://continuinged.uml.edu/general/advising.cfm> or call 978-934-2474 and a student support specialist will make an appointment for you.

### Earn Credit for Prior Learning

Please contact your Faculty Program Coordinator or schedule an appointment to discuss how you can complete your degree in a timely manner. Qualified degree candidates can earn credit for prior learning or certifications through University approved course equivalency procedures. For example, Bachelor degree students who complete all their credits at the University may apply for up to a maximum of 30 course equivalency credits.



# EARN A BACHELOR'S DEGREE IN PSYCHOLOGY

entirely online...

OR AS A MIX OF ONLINE AND ON CAMPUS COURSES

UMass Lowell's Bachelor of Arts in Psychology can be completed on a part-time basis. Students in this program are instilled with a better understanding of human behavior — a valuable asset for careers in areas such as social work, education, management and marketing.

For additional information, visit

<http://continuinged.uml.edu/online/psychology/>



"My family and I came to the United States from Cambodia when I was still very young, and I am the first in my family to earn my bachelor's degree. Even though I live nearby, I earned my degree entirely online because it was so convenient, and I could work full time."

— Bunloe Huot, Bachelor of Arts in Psychology, '15

## Earn a Bachelor's Degree in English Online!

### Interested in the fields of literary studies or creative & professional writing?

The online Bachelor's Degree in English offers a flexible and vigorous curriculum grounded in British and American literary traditions, in the study of contemporary critical methods, and in the regular practice of research and writing.

#### New this Summer:

ENGL.2110-031 Poetry

ENGL.2980-061 Children's Literature

ENGL.4010-031 Selected Authors: William Faulkner

See page 10 for a complete list of English courses this semester!

For further information, visit

<http://continuinged.uml.edu/degrees/english.cfm> or email [englishstudies@uml.edu](mailto:englishstudies@uml.edu)



"I've been really impressed by the caliber of UMass Lowell's Online Bachelor's Degree in English. It's an innovative program, and that's the primary reason I chose UMass Lowell. When I was looking at online degrees in English, UMass Lowell's program had just launched, and I liked that it was new and inventive."

Charla McKenna

Online English Degree Student

# Complete your Degree

On campus,  
online,  
or both!

Interested in completing your degree? Continuing Education academic counselors can meet with you to review your previously completed coursework and suggest a program of study that will allow you to maximize the number of credits you can transfer into the program. The degree programs below are part-time and are designed to allow degree completers the greatest flexibility towards achieving their goals.

## Earn a Bachelor's Degree in...

### ON CAMPUS

#### Mathematics

Earn a Bachelor of Arts or a Bachelor of Science Degree in Mathematics. Math courses are available during the evenings on campus, making it easier than ever for busy adults to pursue or complete their degree part-time.

visit <http://continuinged.uml.edu/degrees/>

### ONLINE

#### Information Technology

Earn your degree from a leader in Information Technology programs:

- B.S. in Information Technology
- B.S. in Information Technology: Business Minor Option

See [http://continuinged.uml.edu/degrees/bs\\_informationtechnology.cfm](http://continuinged.uml.edu/degrees/bs_informationtechnology.cfm) for details.

### ONLINE

#### Liberal Arts

Choose two of the following concentration areas:

- Psychology Concentration
- Art History Concentration
- Gender Studies Concentration
- Legal Studies Concentration
- History Concentration
- English Concentration
- Economics
- Political Science

Additional information on the Bachelor's Degree in Liberal Arts can also be found at <http://continuinged.uml.edu/degrees/bladegree.cfm>

### ONLINE

#### Criminal Justice

Interested in a career in law enforcement, the courts system or corrections? UMass Lowell, a recognized leader in Criminal Justice Education is now offering its popular Bachelor's Degree in Criminal Justice entirely online!

For details, visit <http://continuinged.uml.edu/degrees/bscrimjustice.cfm>

### PART TIME, ON CAMPUS

#### Engineering Technology

UMass Lowell offers Associate's and Bachelor's degrees in Mechanical Engineering Technology and Electronic Engineering Technology.

See <http://continuinged.uml.edu/engtech>

## PART-TIME UNDERGRADUATE DEGREE PROGRAMS

### COLLEGE OF ENGINEERING

#### Associate's Degrees

Electronic Engineering Technology  
Mechanical Engineering Technology

#### Bachelor's Degrees

Electronic Engineering Technology  
Mechanical Engineering Technology

### COLLEGE OF FINE ARTS, HUMANITIES & SOCIAL SCIENCES

#### Bachelor's Degrees

Criminal Justice  
Criminal Justice: Paralegal Option  
Liberal Arts  
English  
Psychology

### COLLEGE OF SCIENCES

#### Associate's Degree

Information Technology

#### Bachelor's Degrees

Applied Mathematics  
Information Technology  
Information Technology:  
Business Minor Option  
Mathematics  
Mathematics: Statistics  
Concentration  
Mathematics: Teacher  
Concentration

### MANNING SCHOOL OF BUSINESS

#### Associate's Degree

Management

#### Bachelor's Degree

Business Administration

### COLLEGE OF HEALTH SCIENCES

#### Bachelor's Degree

Nursing - RN to BS Degree  
Completion Option

### BLENDED PROGRAM

## Nursing: RN to BS Degree Completion Option

Speak with an Advisor at our RN to BS Open House:  
Monday, May 9 from 5-7pm

Join us at our RN to BS Open House at UMass Lowell's Health & Social Sciences Building, 113 Wilder Street in Lowell. RSVP to Stephanie Lane at 978-934-4776 or email [Stephanie\\_Lane@uml.edu](mailto:Stephanie_Lane@uml.edu)



"I liked that I was able to take a mix of online and on campus courses. I cannot say enough good things about my experience at UMass Lowell."

Colleen Silva, BSN ('15) RN CCM  
Case Management Supervisor

"There's something about going to school that keeps you young, it keeps you motivated. The atmosphere at UMass Lowell has been great."

Don Ludwig, RN to BS, 2016  
Dialysis RN



For more information, visit <http://continuinged.uml.edu/rntobs.cfm>



# ONLINE DEGREE PROGRAMS!



Earn your degree from a nationally-recognized leader in online education. At UMass Lowell, we are committed to providing high-quality, affordable online programs - all highly interactive and all backed by the academic integrity of a top-ranked research university.

## Online Undergraduate Degree Programs

- Bachelor's Degree in Business Administration B.S.B.A. **NEW**
- Associate's Degree in Management, A.S.
- Bachelor's Degree in Criminal Justice, B.S. **NEW**
- Bachelor's Degree in English, B.A. **NEW**
- Bachelor's Degree in Information Technology, A.S. & B.S.  
*Business Minor Concentration Available*
- Bachelor of Liberal Arts Degree, B.L.A.
- Bachelor's Degree in Psychology, B.A.

## Online Undergraduate Certificate Programs

- Certificate in Java Development **NEW**
- Certificate in Contemporary Communications
- Certificate in Data/Telecommunications
- Certificate in Graphic Design and Digital Imaging
- Certificate in Information Technology
- Certificate in Multimedia Applications
- Certificate in Paralegal Studies
- Certificate in Security Management and Homeland Security
- Certificate in Linux/UNIX
- Certificate in Website Design and Development

## Online Master's Degree Programs

- Master's Degree in Accounting (Online MSA) **NEW**
- Master's Degree in Finance **NEW**
- Master's Degree in Security Studies: Critical Infrastructure Protection Concentration **NEW!**
- Master's Degree in Security Studies: International Security Concentration **NEW!**
- Master's Degree in Security Studies: Industrial and Economic Security Concentration **NEW!**
- Master's Degree in Security Studies: Cyber Security Concentration, M.S. **NEW**
- Master's Degree in Security Studies: Homeland Defense Concentration, M.A. **NEW**
- Master's Degree in Criminal Justice, M.A.
- Master's Degree in Business Administration (Online MBA)
- Master's Degree in Educational Administration, M.Ed.
- Master's Degree in Information Technology, M.S.
- Master's Degree in Reading and Language, M.Ed.
- Master's Degree in Curriculum & Instruction, M.Ed.
- Master's Degree in Curriculum & Instruction: Science Education Option, M.Ed.
- Master's Degree in Curriculum & Instruction: Autism Studies Option, M.Ed.

## Online Education Specialist Degrees

- Curriculum & Instruction, Ed.S.
- Reading & Language, Ed.S\*
- Administration, Planning & Policy, Ed.S\*

## Online Graduate Certificate Programs

- Certificate in Behavioral Intervention in Autism
- Certificate in Biomedical Engineering
- Certificate in Clinical Pathology
- Certificate in Domestic Violence Prevention
- Certificate in Foundations of Business
- Certificate in Forensic Criminology
- Certificate in Health Informatics
- Certificate in Network Security
- Certificate in New Venture Creation
- Certificate in Plastics Engineering
- Certificate in Security Studies
- Certificate in System Models and Management
- Certificate in Victim Studies

Call (978) 934-2474 or visit <http://continuinged.uml.edu/online> to test drive an online course today!

## Requirements and Registration Procedures for Online Courses

**Online Education Course Registration** Students should make sure they have fulfilled the particular course prerequisites prior to registering for a course. See the registration information on page 22 and the Non-Degree Registration Form at <http://continuinged.uml.edu/echosign>. The registration form also contains a user-friendly checklist to help you through the registration and course login process. Note: Please be sure to provide your email address when you register!

**Blackboard Usernames and Passwords** All online students must obtain their Blackboard online course usernames and passwords by visiting <http://continuinged.uml.edu/online> and clicking on the "Get your username & password here" link. Online course usernames and passwords become available two business days after registering for an online course. The "Get your username & password here" link is usually made available to students approximately three weeks prior to the start of the semester.

**All Online Students** are encouraged to review the Online Education website at <http://continuinged.uml.edu/online/courses/> to view course software and textbook requirements, course descriptions, chat hours and other course specific information. Online courses require weekly participation and assignments. Online students can expect to spend 6-10 hours per course each week engaged in course-related activities. A microphone and speaker, or a headset is recommended.

**Technical Skills and Requirements** To take an online course, you'll need access to either a PC w/Windows 7 or later or a Mac w/OS 10.7 or later, the latest version of Java, and a high speed Internet connection (DSL, Cable or FiOS). Visit <http://continuinged.uml.edu/online/techrequire.cfm> for additional information. Some online courses may require additional software. Please check the course details on our website for additional requirements. Students are responsible for learning to use course-related software before enrolling in an online course.

**Test Drive and Tutorials** All students new to Online Education should complete the free "Test Drive a Course" demo available at <http://continuinged.uml.edu/online/tutorial/testdrive.htm>. Tutorials are available on the Online Education Website at: <http://continuinged.uml.edu/online/tutorial>.

For the latest information regarding our online courses and programs, visit our website at <http://continuinged.uml.edu/online> or call (978) 934-2474.

**Note:** The University of Massachusetts System offers additional courses and programs online. Visit [www.UMassOnline.net](http://www.UMassOnline.net) for more details.

**Please note:** There are no veteran or senior citizens waivers for online courses. Please refer to pages 22-23.

## EARN YOUR MBA ONLINE!

UMass Lowell's Manning School of Business is now offering their popular on campus MBA program online so that students both near and far can benefit from the program's commitment to excellence.

**Master of Business Administration — Earn Your MBA Online, On Campus or Both!**  
<http://continuinged.uml.edu/online/mba/>

Concentrations in:

- Accounting
- Finance
- Information Technology
- Marketing
- International Business

Visit <http://continuinged.uml.edu/online/MBA/> for details.



UMass Lowell's Manning School of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB) International.



UMass Lowell's Online MBA has been ranked among the Best by US News & World Report, the Princeton Review and GetEducated.com

For more information, contact the MBA Office at the Manning School of Business, (978) 934-2848.

## Online Marketing Concentration for the MBA Program

Be part of this fast-paced profession and earn your degree with a focus on marketing!



Marketing is more important than ever. As the world gets flatter and the competitive landscape increases, marketing's job is to differentiate the company product, service or idea. Marketing professionals serve an essential function of any business or organization of getting the word out about a product or service. Any organization can benefit from positive marketing, including nonprofits, government agencies or entrepreneurs.

This Spring UMass Lowell will begin offering new courses as part of our Marketing Concentration for the MBA program. Courses include:

- Digital Marketing
- Customer and Markets – **Offered Summer 2016!**
- New Product Development
- Market Research

Visit <http://continuinged.uml.edu/online/MBA/> for details.



# SIGNATURE PORTFOLIO OF ONLINE DEGREES & CERTIFICATES

## ONLINE GRADUATE PROGRAMS FOR TEACHERS

10 Courses for your M.Ed. or Ed.S.

**Earn Your M.Ed. or Ed.S. entirely online from one of New England's best graduate-level education programs.**

The following graduate degree programs are available:

- Educational Administration, M.Ed., Ed.S.\*
- Curriculum and Instruction, M.Ed., Ed.S.
- Reading and Language, M.Ed., Ed.S.\*

\*Licensure options are available for Massachusetts teachers.

**NEW! Earn Your Doctorate in Education Online Plus a One Week Summer Residency**

- Leadership in Schooling, Ed.D.
- Leadership in Schooling, STEM Option, Ed.D.

For more details, visit <http://continuinged.uml.edu/education>

**Affordable Tuition!**

Only \$470 per credit;  
\$1,410 for a  
3-credit course!

**UMass Lowell's Graduate Education Program was recently ranked 9th nationally by US News & World Report as one of the Best Online Education programs!**



**NCATE**  
The Standard of Excellence  
in Teacher Preparation

Accredited by the National Council for Accreditation of Teacher Education.

**Call the Graduate School of Education for a FREE BROCHURE**

Call 978-934-4600 or email [edoffice@uml.edu](mailto:edoffice@uml.edu)



## Behavioral Intervention in Autism

Online Graduate Certificate for BCBA Preparation

<http://continuinged.uml.edu/online/autism.cfm>

Early behavioral intervention is key in the successful treatment of autism. UMass Lowell's Department of Psychology offers an award-winning online Graduate Certificate Program in Behavioral Intervention in Autism. This six-course online graduate program is designed for those interested in becoming a Board Certified Behavior Analyst® (BCBA) through the Behavior Analysis Certification Board® (BACB) and will fulfill the Board's specific coursework requirements. Courses are taught by expert behavior analysts from around the country who work for some of the most respected centers for autism treatment and research.

Required Courses (6):

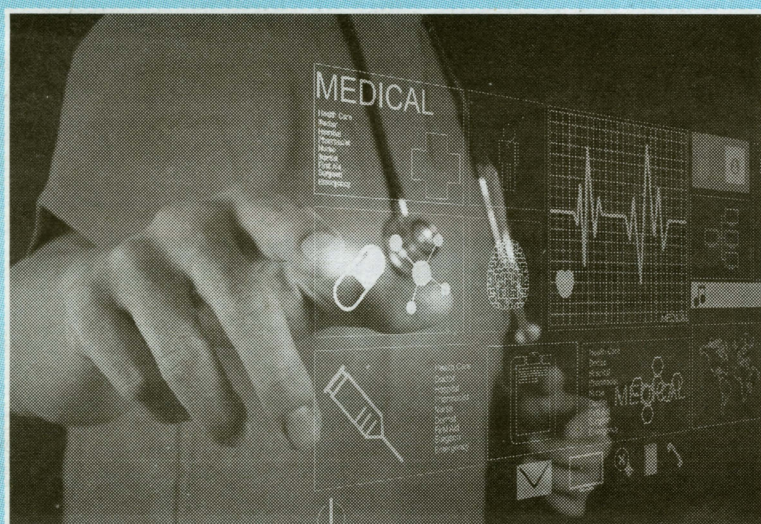
- PSYC.5610 Introduction to Behavioral Intervention in Autism - Available this Summer!
- PSYC.5620 Teaching and Positive Behavioral Support in Autism - Available this Summer!
- PSYC.5650 Measurement & Experimental Design in Behavioral Intervention - Available this Summer!
- PSYC.5660 Functional Analysis and Treatment of Challenging Behavior - Available this Summer!
- PSYC.5680 Behavioral Intervention Program Models in Autism - Available this Summer!
- PSYC.5720 Legal and Ethical Issues in Professional Practice - Available this Summer!



### ★NEW THIS SUMMER!! PSYC.5630 Management Strategies in Applied Behavioral Interventions

This online course, along with PSYC.5610, PSYC.5620, and PSYC.5660 shown above, will satisfy the educational requirements for those with Bachelor's degrees who are interested in becoming a BACB Board Certified Assistant Behavior Analyst (BCaBA).

## Earn a Graduate Certificate in Health Informatics Entirely Online!



A 4-course graduate certificate program for individuals who wish to apply current computer technology to the management of healthcare services in clinical, financial and record keeping areas. These courses can be applied towards UMass Lowell's Blended M.S. in Health Informatics & Management.

**Required Courses:**

- PUBH.5310 Health Informatics - **Available Online this Summer!**
- PUBH.6070 Healthcare Information Systems - **Available Online this Summer!**

**Elective Courses (choose 2):**

- PUBH.6320 Health Information Systems Planning
- PUBH.6330 Healthcare Database Design - **Available Online this Summer**
- PUBH.6350 Healthcare Project Management - **Available Online this Summer**
- PUBH.6380 Strategic Planning in Healthcare and Healthcare Information Technology
- PUBH.6390 Electronic Health Records Systems - **Available Online this Summer**

For more information contact Kimberly Flodin at 978-934-6628 or [Kimberly\\_Flodin@uml.edu](mailto:Kimberly_Flodin@uml.edu)

## Earn Your Associate's Degree in Information Technology from a Top-Ranked IT Program

UMass Lowell's Associate's Degree in Information Technology is designed for those who are interested in pursuing a career in the high demand field of Information Technology. In addition to concentrated electives and general studies requirements, the IT Associate's degree program includes popular courses such as:

- Introduction to Information Systems
- Technical and Scientific Communication
- Programming (various languages)
- Graphics for Multimedia and the Web
- Desktop Video Production
- Website Development
- Web Database Development

Graduates of the A.S. in Information Technology can count all of their associate's degree courses towards UMass Lowell's B.S. in Information Technology once they're ready to take their education to the next level.

**UMass Lowell's A.S. in Information Technology was recently ranked nationally as #2 Best Online IT Associate's Degree by TheBestSchools.org**



For additional information on UMass Lowell's Online Associate's Degree in Information Technology, visit [http://continuinged.uml.edu/degrees/as\\_informationtechnology.cfm](http://continuinged.uml.edu/degrees/as_informationtechnology.cfm)



# UNDERGRADUATE CERTIFICATE PROGRAMS

6-10 Courses to  
a New Career

Courses from a completed certificate may be counted towards a degree. Call or email us for details. UMass Lowell also offers several Online Graduate Certificate Programs. See page 4.

## Creative Arts/Media

### ❖ Graphic Design & Digital Imaging

Available entirely online

Use Towards a Degree in Information Technology or Liberal Arts!

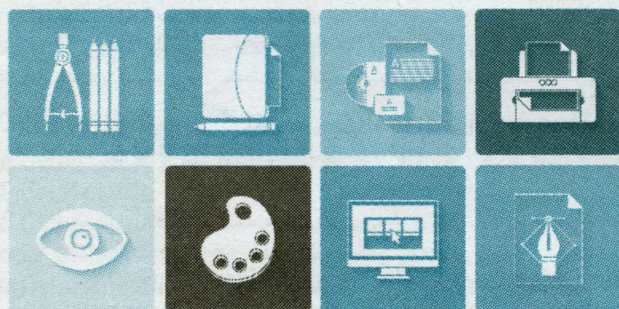
#### Required Courses: (6)

GRFX.2000	Introduction to Graphic Design
GRFX.2020	Fundamentals of Typography
GRFX.2030	Photographic Imaging
GRFX.2110	Desktop Publishing: Print Production
GRFX.3000	Advanced Graphic Design
GRFX.4000	Portfolio Production Seminar

#### Electives: (Choose 3):

GRFX.2040	Computer Graphics & Illustration
GRFX.2120	Website Design: Dreamweaver
GRFX.3120	Advanced Website Design
GRFX.3150	Design for Advertising
INFO.2300	Introduction to Multimedia
INFO.2310	Graphics for Multimedia and the Web
INFO.2380	Website Development: Adobe® Dreamweaver

\*Please call an advisor for substitutions for required courses.



### ❖ Multimedia Applications

Available on campus and online

Use Towards a Degree in Information Technology!

#### Required Courses: (4)

INFO.2300	❖ Introduction to Multimedia
INFO.2310	❖ Graphics for Multimedia and the Web
INFO.2320	❖ Desktop Video Production
INFO.2470	❖ Web Authoring: Adobe® Flash®

#### Electives: (Choose 2):

GRFX.2000	Introduction to Graphic Design
GRFX.2030	Photographic Imaging
GRFX.2040	Computer Graphics & Illustration
GRFX.2120	Website Design: Dreamweaver
GRFX.3120	Advanced Website Design
INFO.2380	Website Development: Dreamweaver
INFO.2500	❖ E-Commerce on the Web
INFO.2910	❖ Introduction to HTML
INFO.3060	❖ Introduction to XML
INFO.3460	❖ Digital Media Delivery

## Interested in Electronics?

Check out UMass Lowell's Introductory Certificate Program in Electronic Engineering Technology!

<http://continuinged.uml.edu/certificates/elecengtech.cfm>

### ❖ Website Design & Development

Use Towards a Degree in Information Technology!

#### Website Design Track

Available online

Note: Students pursuing the Website Design Track should have basic familiarity with HTML. Those who do not have basic familiarity with HTML are encouraged to take INFO.2910 Introduction to HTML as one of their electives prior to taking the required courses in this program.

#### Required Courses: (4)

INFO.2310	❖ Graphics for Multimedia & the Web
GRFX.2120	Website Design: Dreamweaver
GRFX.3120	Advanced Website Design
INFO.2470	Web Authoring: Adobe® Flash®

#### Electives: (Choose 2):

GRFX.2030	Photographic Imaging
INFO.2300	❖ Introduction to Multimedia
INFO.2380	Website Development: Dreamweaver
INFO.2480	❖ Website Database Implementation
INFO.2500	❖ E-Commerce on the Web
INFO.2910	❖ Introduction to HTML
INFO.2920	❖ Advanced DHTML
INFO.3020	❖ JavaScript
INFO.3060	❖ Introduction to XML
INFO.3460	❖ Digital Media Delivery

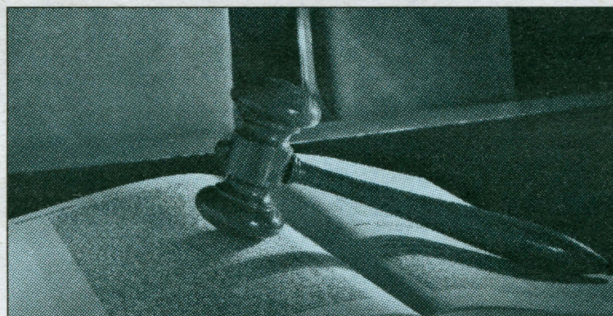
\*Please call an advisor for substitutions for required courses.

Note: Other INFO.xxxx courses may be substituted as electives for the Website Development Track with prior approval from the certificate program coordinator.

## Criminal Justice & Legal Studies

Employment of paralegals and legal assistants is projected to grow 17% from 2012 to 2022, faster than the average for all occupations.<sup>1</sup>

<sup>1</sup> Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2014-15 Edition, Paralegals and Legal Assistants, on the Internet at <http://www.bls.gov/ooh/legal/paralegals-and-legal-assistants.htm> (visited October 31, 2014).



### ❖ Paralegal Studies

Available on campus and online

Use Towards a Degree in Criminal Justice!

#### Required Courses: (4)

LGST.1030	Introduction to Paralegal Studies
LGST.3700	Real Estate Law
LGST.3870	Legal Research Methods
LGST.3900	Litigation

#### Electives: (Choose 2):

LGST.3630	Corporate and Property Law
LGST.3660	International Law
LGST.3670	Environmental Law
LGST.3760	Family Law
LGST.3810	Women and the Law
LGST.3830	Alternative Dispute Resolution
LGST.3860	Intellectual Property
LGST.3920	Wills, Trusts, and Estates
LGST.4970	The Paralegal Practicum*

\*For Massachusetts students only.

### ❖ Security Management and Homeland Security

Available on campus and online

Use Towards a Degree in Criminal Justice!

#### Required Courses: (4)

CRIM.1150	Introduction to Homeland Security
CRIM.2130	Emergency Management
CRIM.3120	Security Management
INFO.3850	❖ Introduction to Information Security

#### Electives: (Choose 2):

CRIM.3490	Intelligence and National Security
CRIM.2340	Criminal Law
CRIM.2480	Terrorism
CRIM.3260	Hate Crime
CRIM.3420	Criminal Profiling
CRIM.3430	Forensic Psychology
CRIM.3480	Advanced Seminar on Weapons of Mass Destruction and Terrorism
CRIM.3800	Selected Topics in Criminal Justice

UMass Lowell is no longer accepting applications into the Database Management Technologies Certificate Program.

❖ Free Microsoft software is available for UML students enrolled in INFO.xxxx or MSIT.xxxx courses. Visit [continuinged.uml.edu/msdnaa.htm](http://continuinged.uml.edu/msdnaa.htm) for details.

#### Website Development Track

Available online

#### Required Courses: (4)

INFO.2910	❖ Introduction to HTML
INFO.2380	Website Development: w/Adobe Dreamweaver®
INFO.2480	❖ Website Database Implementation
INFO.3060	❖ Introduction to XML

#### Electives: (Choose 2):

GRFX.2120	Website Design
GRFX.3120	Advanced Website Design
INFO.2270	❖ Developing Interactive Help Systems
INFO.2310	❖ Graphics for Multimedia & the Web
INFO.2450	❖ Website Server Administration
INFO.2460	❖ Active Server Pages .NET
INFO.2470	Web Authoring: Adobe® Flash®
INFO.2500	❖ E-Commerce on the Web
INFO.2920	❖ Advanced DHTML
INFO.2970	Intro to Java Programming
INFO.3010	❖ Java Programming
INFO.3020	❖ JavaScript
INFO.3050	❖ Survey of Perl/Python/PHP
INFO.3460	❖ Digital Media Delivery

## Information Technology

### ❖ Information Technology

Available on campus and online

Use Towards a Degree in Information Technology!

#### Required Courses: (2)

INFO.1600	❖ Introduction to Information Systems*
INFO.2020	❖ Microsoft® Office*

#### Electives: (Choose 4):\*\*

##### Programming Electives:

INFO.2110	❖ Introduction to Programming with C, Part I
INFO.2120	❖ Introduction to Programming with C, Part II
INFO.2200	❖ Visual Basic®
INFO.2670	❖ C Programming
INFO.2680	❖ C++ Programming
INFO.2690	❖ Advanced C++
INFO.2700	❖ Visual C++ .NET
INFO.3640	❖ Problem Solving with C

##### Database Electives:

INFO.1710	❖ Applications Software: Microsoft® Access
INFO.3420	❖ Web-Enabled Database Development
INFO.4740	❖ Relational Database Concepts

##### Multimedia/Web Electives:

INFO.2300	❖ Introduction to Multimedia
COMP.1130	Exploring the Internet

##### Additional Electives:

INFO.3110	❖ Intro to the Linux/UNIX® Operating System
INFO.3120	❖ Shell Scripting
INFO.4610	❖ LAN/WAN Technologies

\*Students with appropriate experience can replace the required courses with any of the electives courses.

Note: This is a partial list. For the complete list of courses that may be applied as electives, see the Online & Continuing Education website for computer courses with the INFO. prefix, or contact the Faculty and Student Support Center at 978-934-2474.

### ❖ Linux®/UNIX®

Available on campus and online

Use Towards a Degree in Information Technology!

#### Required Courses: (4)

INFO.2670	❖ C Programming
INFO.3110	❖ Intro to the Linux/UNIX® Operating System
INFO.3120	❖ Shell Scripting
INFO.3600	❖ Introduction to Data Structures

#### Electives: (Choose 2):

INFO.2680	❖ C++ Programming
INFO.2690	❖ Advanced C++
INFO.3130	❖ Linux/UNIX Internals Overview
INFO.3160	❖ UNIX System Administration
INFO.3180	❖ Advanced Linux/UNIX Internals/Tuning
INFO.3190	❖ Introduction to Linux
INFO.3210	❖ Linux/UNIX System Administration

### ❖ Data/Telecommunications

Available on campus and online

Use Towards a Degree in Information Technology!

#### Required Courses: (5)

INFO.2670	❖ C Programming
INFO.4610	❖ LAN/WAN Technologies
INFO.4620	TCP/IP and Network Architecture
INFO.4570	Network Security
INFO.4640	Network Management

## NEW! The Java Development Certificate Program

Available online

Use Towards a Degree in Information Technology!

The US Bureau of Labor Statistics, Occupational Outlook Handbook, 2010-2011 edition reports that the demand for Information Technology workers is expected to continue its growth trajectory through 2018. UMass Lowell's new Java Development Certificate Program is designed to provide IT professionals with a cluster of Java courses that will make them more competitive in today's marketplace.

#### Required Courses (4):

INFO.2970	Intro to Java Programming
INFO.3010	Java Programming
INFO.3030	Advanced Java Programming
INFO.3080	Agile Software Development*

\*Please call an advisor for substitutions for required courses.

#### Electives - Choose 2:

INFO.2250	Survey of Programming Languages
INFO.2670	C Programming
INFO.3040	Introduction to Java Web Development
INFO.3050	Survey of Perl/Python/PHP
INFO.3070	Advanced Topics in Java & XML

All of the courses for this certificate can also be counted towards UMass Lowell's Bachelor's Degree in Information Technology. For more information, visit <http://continuinged.uml.edu/certificates/java.cfm>



# CUSTOMIZED TRAINING

Designed to meet your company's business needs

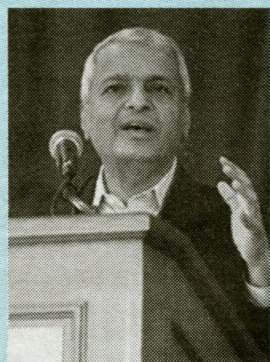
\* [HTTP://CONTINUINGED.UML.EDU/CORPORATE](http://continuinged.uml.edu/corporate)

## ATTENTION HIGHER EDUCATION INNOVATORS

Join Us at the Fifth Annual

## Deshpande Symposium

FOR INNOVATION AND  
ENTREPRENEURSHIP  
IN HIGHER EDUCATION



June 13-15, 2016

Join peers from across North America as we examine best practices in launching innovative programs and entrepreneurial campuses. Share your program successes, and build collaborations that strengthen your campus and community.

Topics will include:

- Developing Entrepreneurial Universities: Culture & Ecosystems
- Entrepreneurship in the Curriculum
- University Research Commercialization and Start-ups

Held at UMass Lowell's Inn & Conference Center

Visit <http://www.deshpandesymposium.org> for details!



## The Power and Potential of Women

The University of Massachusetts Lowell is pleased to be hosting a one-day conference of women leaders on Tuesday, June 21, 2016 to discuss challenges and paths forward to empower women in today's workplace.

For more information, visit <http://continuinged.uml.edu/wlc>



UMass Lowell is a PMI® Registered Global Education Provider

## PROJECT MANAGEMENT SUMMER 2016 NONCREDIT • CERTIFICATE

Seminars may be taken individually or applied towards the Project Management Certificate.

For a Project Management Brochure or for additional information, call (978) 934-2473.

To register call: (978) 934-2405!

For additional information, visit:  
<http://continuinged.uml.edu/corporate/projectmanagementcertificate.cfm>

*"These are the best Project Management courses I've taken. The instructors make it easy for me to apply the classroom skills at my office the very next day."*

Cheryl Steiner, Project Manager

UMass Lowell is a PMI® Registered Global Education Provider

### REQUIRED SEMINARS:

#### Project Management: Planning & Scheduling

CRS #00.608-043  
Two Days; Meets 9am-4pm;  
Thursday/Friday, May 5, 6  
Held on Lowell Campus; Tuition: \$825;  
Contact Hours/PDUs: 14

#### Project Management: Resources and Budgeting

CRS #00.609-043  
Two Days; Meets 9am-4pm;  
Thursday/Friday, June 2, 3  
Held on Lowell Campus; Tuition: \$825;  
Contact Hours/PDUs: 14

#### Risk Management

CRS #00.614-043  
Two Days; Meets 9am-4pm;  
Thursday/Friday, June 23, 24  
Held on Lowell Campus; Tuition: \$825;  
Contact Hours/PDUs: 14

### ELECTIVES SEMINARS (CHOOSE 3):

#### Organizational Skills

CRS # 00.617-041  
One Day; Meets 9am-4pm  
Friday, June 17  
Held on Lowell Campus; Tuition: \$495;  
Contact Hours/PDUs: 7

#### Negotiation Skills

CRS #00.618-041  
Two Days; Meets 9am-4pm  
Monday/Tuesday; May 23, 24  
Held on Lowell Campus; Tuition: \$825;  
Contact Hours/PDUs: 14

#### Conflict Resolution for Project Managers

CRS #00.624-041  
Two Evenings; Meets 6pm-9:30pm  
Mondays; May 2, 9  
Held on Lowell Campus; Tuition: \$495  
Contact Hours/PDUs: 7

### Procurement & Contract Management

CRS #00.625-041  
Four Evenings; Meets 6pm-9:30pm  
Tuesdays; May 10, 17, 24, 31  
Held on Lowell Campus; Tuition: \$825  
Contact Hours/PDUs: 14

### Communication & Team Management

CRS #00.626-041  
Two Days; Meets 9am-4pm  
Thursday/Friday; April 7, 8  
Held on Lowell Campus; Tuition: \$825;  
Contact Hours/PDUs: 14

### OPTIONAL SEMINAR:

#### PMP Exam Preparation

CRS #00.621-042  
Four Evenings; Meets 6pm-9:30pm;  
Wednesdays, June 1, 15, 22, 29  
Held on Lowell Campus; Tuition: \$825;  
Contact Hours/PDUs: 14

## Project Management Noncredit Advanced Certificate Program

UMass Lowell's Advanced Project Management Certificate Program offers working professionals intensive training in advanced project management topics. This program emphasizes important and relevant information useful in today's fast-paced environment. Focused on critical topics in project management, the advanced certificate consists of five seminars and is appropriate for project managers who want to increase their knowledge as well as PMPs who need to maintain their credentials.

### Summer 2016 Schedule

To register call 978-934-2405  
Choose 4 of the following 5 seminars to complete the certificate:

### SEMINARS:

#### Stakeholder Management

CRS #00.651-041  
One Day; Meets 9am-4pm;  
Friday, April 15  
Held on Lowell Campus; Tuition: \$525  
Contact Hours/PDUs: 7

#### Project Management in the Public Sector

CRS #00.652-041  
Two Days; Meets 9am-4pm;  
Monday/Tuesday, June 27, 28  
Held on Lowell Campus; Tuition: \$850  
Contact Hours/PDUs: 14

#### Critical Thinking for Project Managers

CRS #00.653-041  
One Day; Meets 9am-4pm;  
Friday, June 10  
Held on Lowell Campus; Tuition: \$525  
Contact Hours/PDUs: 7

#### Total Project Control Team Case Study

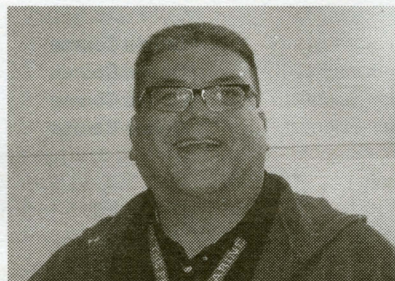
Prerequisite: PMP, Planning & Scheduling, Resources & Budgeting or equivalent  
CRS #00.654-041  
One Day; Meets 9am-4pm;  
Friday, May 20  
Held on Lowell Campus; Tuition: \$525  
Contact Hours/PDUs: 7

#### Agile & Scrum Training

CRS #00.638-042  
One Day; Meets 9am-4pm;  
Monday, June 20  
Held on Lowell Campus; Tuition: \$525  
Contact Hours/PDUs: 7

## CORPORATE PARTNERSHIPS

## Courses Can be Delivered Onsite at Companies



*"Analog's partnership with UMass Lowell has been fantastic. It's been so convenient to take courses where I work. I'm going to graduate with my Bachelor's Degree in Electronic Engineering Technology in 2016. I can't say enough about the program. It's been a wonderful opportunity to earn my degree from UMass Lowell at Analog."*

Tony Herrera,  
Associate Equipment Engineer  
Analog Devices, Inc.

## PLASTICS SEMINARS



Interested in  
**PLASTICS?**

Attend our plastics seminars on campus — or on site at your company!

Visit our website at  
<http://continuinged.uml.edu/plastics>



Summer Session I

Classes Begin  
May 16, 2016

Full Term Online Classes (-031): May 16–August 6, 2016  
Accelerated Online Classes (-061) May 16–July 23, 2016  
Summer I On Campus (-011): May 16–June 27, 2016

M/W Classes begin on Monday, May 16 and include 3 FRIDAYS: May 20, June 3 and June 27 at the regularly scheduled hours.  
T/Th Classes begin on Tuesday, May 17 and include 2 FRIDAYS: May 27 and June 10 at the regularly scheduled hours.

Please check course numbers and prerequisites to ensure enrollment in the correct class.

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
ACCOUNTING						
2488	ACCT.2010-011	Accounting/Financial	T/Th 6:00-8:50 pm	3		S. DeSimone
2491	ACCT.2010-061	Accounting/Financial	>Online Course	3		C. Carter
2495	ACCT.2020-011	Accounting/Managerial	M/W 6:00-8:50 pm	3	P: ACCT.2010	L. Christianson
2496	ACCT.2020-061	Accounting/Managerial	>Online Course	3	P: ACCT.2010	S. Suh
2669	ACCT.2030-061	Fundamentals of Accounting	>Online Course	3		C. Rohland
2498	ACCT.3010-011	Intermediate Accounting I	M/W 6:00-8:50 pm	3	P: ACCT.2020; BSBA students	S. Tate
2500	ACCT.3020-011	Intermediate Accounting II	M/W 6:00-8:50 pm	3	P: ACCT.3010	S. Suh
2502	ACCT.3030-011	Accounting Information Systems	T/Th 6:00-8:50 pm	3	P: ACCT.3020	S. Strickland
2504	ACCT.3210-061	Cost Accounting	>Online Course	3	P: ACCT.3010	H. Sharma
2506	ACCT.4010-061	Advanced Financial Accounting	>Online Course	3	P: ACCT.3020	J. Lin
2513	ACCT.4210-061	Auditing	>Online Course	3	P: ACCT.3030	H. Sharma
2514	ACCT.4310-061	Federal Income Taxes	>Online Course	3	P: ACCT.2020	J. Casello Bouges
ART/COMPUTER GRAPHICS			(See also Studio Art and Art History)			
3312	GRFX.2000-061	Introduction to Graphic Design	>Online Course	3	P: Basic computer proficiency; requires Adobe InDesign, Photoshop & Illustrator CC*	P. Orfao
3316	GRFX.2020-061	Fundamentals of Typography	>Online Course	3	P: Basic computer proficiency; requires Adobe® Illustrator® & Photoshop® CC*	C. Meeks
3319	GRFX.2030-061	Photographic Imaging: Photoshop	>Online Course	3	P: Basic computer proficiency; requires Adobe Photoshop CC*	E. Carlson
3320	GRFX.2040-061	Computer Graphics and Illustration	>Online Course	3	P: Basic computer proficiency; requires Adobe® Illustrator CC*	C. Meeks
3321	GRFX.2110-061	Desktop Publishing: Print Production	>Online Course	3	P: GRFX.2000 or ARTS.2910 or ARTS.2100; GRFX.2020 as prereq or coreq or instructor permission; requires Adobe InDesign®, Photoshop & Illustrator CC*, plus access to a scanner	R. Gardner-Milan
3322	GRFX.2120-061	Website Design: Dreamweaver	>Online Course	3	P: HTML and Photoshop familiarity required; requires Dreamweaver® and Photoshop CC*	C. Perry
3323	GRFX.3000-061	Advanced Graphic Design	>Online Course	3	P: GRFX.2000 and GRFX.2020 or instructor permission; requires Adobe InDesign, Photoshop & Illustrator CC*	P. Orfao
3324	GRFX.3120-061	Advanced Website Design	>Online Course	3	P: GRFX.2120 or ARTS.3790 or ARTS.3200; requires Dreamweaver and Photoshop CC*	C. Perry
3325	GRFX.3150-061	Design for Advertising	>Online Course	3	P: GRFX.2000 and GRFX.2020, familiarity with Adobe Photoshop and InDesign recommended requires Dreamweaver and Photoshop CC*	R. Gardner-Milan
3326	GRFX.4000-061	Portfolio Production Seminar	>Online Course	3	P: GRFX.2000 or GRFX.2020 and GRFX.2110 and GRFX.3000 or instructor permission; requires Adobe Creative Suite CC*	E. Wetmore
*Access to Adobe's Creative Cloud Software requires a \$19.99 monthly subscription (student rate). For details, please visit www.adobe.com						
Note: While the above courses will not transfer directly into the Art Department's Bachelor of Fine Arts Day School degree program, certain two-course clusters may be accepted for transfer upon prior department approval.						
ART HISTORY						
2676	ARHI.1010-011	Art Appreciation	T/Th 6:30-9:20 pm	3		K. Redman
2483	ARHI.1010-061	Art Appreciation	>Online Course	3		J. Sawyer
2485	ARHI.1050-061	Comparative Arts	>Online Course	3		J. Sawyer
BIOLOGICAL SCIENCES						
3263	BIOL.1110-011	Principles of Biology I	M/W/Th 8:00-10:20 am	3		N. Wernick
3265	BIOL.1170L-011	Experimental Biology I	W/Th 11:00-11:50 am W/Th 1:00-3:50 pm	1(4)		S. Roy
3453	BIOL.2200-011	Principles of Cell and Molecular Biology	M/W/Th 1:00-3:50 pm	3		E. Smith
3269	BIOL.2350-011	Genetics	M/W 8:00-10:50 am	3	P: BIOL.1110 and C: BIOL.2370	W. Savage
3270	BIOL.2370-011	Problems in Genetics	M/W 11:00-11:50 am	1	C: BIOL.2350	W. Savage
3273	BIOL.3420-011	Comparative Vertebrate Anatomy	M/W/Th 10:30 am-12:45 pm	3		J. Choo
3274	BIOL.3440L-011	Comparative Vertebrate Anatomy Laboratory	M/Th 1:30-5:20 pm	2(3)	P: BIOL.3420	J. Choo
3277	BIOL.4190-011	Biochemistry	M/W/Th 8:00-10:20 am	3	P: CHEM.2220, BIOL.2200 or BIOL.2350	C. Myers
3278	BIOL.4210L-011	Biochemistry Techniques	M/W 11:00-11:50 am M/W 1:00-4:50 pm	2(5)	P: BIOL.2330, CHEM.2300	E. Zagriadskaia
3287	LIFE.1010-011	Life Science I	T/Th 6:30-9:30 pm	3		P. Nguyen
3289	LIFE.1060-061	Human Biology	>Online Course	3		G. Skinner-Brassard
3290	LIFE.1100-061	Microbes and Society: Good, Bad and Ugly	>Online Course	3		E. Vorotnikova
3328	LIFE.2140-061	Human Ecology	>Online Course	3		P. Mattson
CHEMICAL ENGINEERING						
2990	CHEN.2010-011	Material Balances	M/W/Th 1:00-3:20 pm	3	P: CHEM.1210, PHYS.1410 or equivalent	G. Dissinger
2993	CHEN.3040-011	Heat Transfer	T/Th 6:00-8:50 pm	3	P: CHEN. 2020, CHEN.3030, MATH 2360 or 2340; C: CHEN.3170	E. Maase
2994	CHEN.3110-011	NEW! Chemical Engineering Thermodynamics	M/W/Th 10:30 am-12:50 pm	3	P: CHEN.2020, MATH.2310	M. Howley
2995	CHEN.3170-011	NEW! Applied Engineering Problem Solving	M/W 6:00-8:50 pm	3	P: MATH 2360 or 2340; C: CHEN.3030	E. Maase
3002	CHEN.4130-011	NEW! Process Dynamics and Control	M/W/Th 8:00 am-10:20 pm	3	P: CHEN.3030, CHEN.3040, CHEN.3060, CHEN.3100, CHEN.3170; MATH.2340 or MATH.2360	G. Dissinger
CHEMISTRY						
2475	CHEM.1010-011	Applied Chemistry for Non-Scientists	M/W 7:00-9:50 pm	3		G. Davis
2471	CHEM.1010-061	Applied Chemistry for Non-Scientists	>Online Course	3		P. Lamprey
2472	CHEM.1010-062	Applied Chemistry for Non-Scientists	>Online Course	3		P. Lamprey
2473	CHEM.1020-031	Forensic Science for the Non-Scientist	>Online Course	3		S. Sawan
2474	CHEM.1020-032	Forensic Science for the Non-Scientist	>Online Course	3		S. Sawan
2476	CHEM.1110-011	General Chemistry I	T/Th 7:00-9:50 pm	3	C: CHEM.1130	D. Lavoie
2479	CHEM.1130L-011	General Chemistry Laboratory I	T/Th 3:30-6:30 pm	1(3)	C: CHEM.1110	D. Pyburn
2482	CHEM.1210-011	Chemistry I	M/W/Th 2:00-5:15 pm	3(4)	C: CHEM.1230L	G. Davis
2493	CHEM.1210-012	Chemistry I	M/W 6:00-9:50 pm	3(4)	C: CHEM.1230L	J. Horta
2525	CHEM.1220-001	Chemistry II	T/Th 9:30-11:50 am	3(4)	P: CHEM.1210; C: CHEM.1240	L. Farris
2497	CHEM.1220-011	Chemistry II	T/Th 6:00-9:50 pm	3(4)	P: CHEM.1210; C: CHEM.1240	K. Shih
2499	CHEM.1230L-011	Chemistry I Laboratory	T/Th 7:00-9:50 pm	1(3)	C: CHEM.1210	G. Gajnos
2503	CHEM.1230L-012	Chemistry I Laboratory	T/Th 7:00-9:50 pm	1(3)	C: CHEM.1210	D. Pyburn
2527	CHEM.1240L-001	Chemistry II Laboratory	Tues 3:30-6:30 pm	1(3)	C: CHEM.1220	G. Gajnos
2507	CHEM.1240L-011	Chemistry II Laboratory	M/W 7:00-9:50 pm	1(3)	C: CHEM.1220	K. Hartman
2510	CHEM.2210-011	Organic Chemistry I	M-Th 5:30-8:00 pm	3(4)	P: CHEM.1220; C: CHEM.2270 or CHEM.2290	K. Reddie
2515	CHEM.2290L-011	Organic Chemistry IB Laboratory	T/Th 1:00-5:00 pm	1(3)	C: CHEM.2210	J. Garcia
2519	CHEM.2290L-012	Organic Chemistry IB Laboratory	M/W 1:00-5:00 pm	1(3)	C: CHEM.2210	J. Garcia
2522	CHEM.3440-011	Physical Chemistry I	T/Th 6:00-8:50 pm	3	P: CHEM.1220, MATH.2310, PHYS.1410	J. Whitten
CIVIL ENGINEERING						
2739	CIVE.3500-011	Structural Analysis	W/Th 9:00 am-12:30 pm	3	P: CIVE.2040 or CIVE.2120	S. Faraji
2751	CIVE.4310-011	Foundation and Soil Engineering	T/Th 6:00-8:50 pm	3	P: CIVE.3300	P. DeStefano



SUMMER I UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
2742	ENGN.2050-011	Statics	M/W/Th 10:30 am-12:50 pm	3	P: PHYS.1410; C: MATH.1320	E. Hajduk
2684	ENGN.2060-011	Strength of Materials	M/W/Th 10:30 am-12:50 pm	3	P: ENGN.2050 and MATH.1320	D. Sullivan
2748	ENGN.2060-012	Strength of Materials	M/W/Th 8:00-10:20 am	3	P: ENGN.2050 and MATH.1320	E. Hajduk
2754	ENGN.2070-011	Dynamics	M/W/Th 10:30 am-12:50 pm	3	P: ENGN.2050 and MATH.1320	S. Pagsuyoin

COMPUTER SCIENCE

(See also Information Technology)

2668	COMP.1010-011	Computing I	M/W/Th 10:30 am- 12:50 pm	3		S. Lin
2670	COMP.1020-001	Computing II	M/W/Th 11:30 am-12:45 pm	3	P: COMP.1010, COMP.1030	D. Adams
2671	COMP.1030L-011	Computing I Laboratory	W/Th 1:30-3:50 pm	1(2)		S. Lin
2673	COMP.1040L-001	Computing II Laboratory	Thurs 2:00-4:20 pm	1(2)	C: COMP.1020	D. Adams
2565	COMP.1130-061	Exploring the Internet	>Online Course	3	Non-CS Majors only; requires access to a microphone	T. Watterson
2675	COMP.2010-001	Computing III	M/W/Th 9:55-11:15 am	4	P: COMP.1020	D. Adams
2679	COMP.3040-085	Foundations of Computer Science	M/W/Th 8:00-9:55 am	3	P: COMP.1020 and MATH.3220	J. McCarthy
3495	COMP.4040-085	Analysis of Algorithms	M/W/Th 10:30 am-12:25 pm	3	P: COMP.1020, MATH.3220 and MATH.3860	J. McCarthy

Please note courses with COMP- and MSIT- prefix can be used as Information Technology electives in the Information Technology program

CRIMINAL JUSTICE

2478	CRIM.1010-031	The Criminal Justice System	>Online Course	3		L. Boyd
2480	CRIM.1150-061	Introduction to Homeland Security	>Online Course	3		R. Sojka
2481	CRIM.1410-031	Introduction to Policing	>Online Course	3		M. Morabito
2486	CRIM.1510-011	Introduction to Corrections	M/W/Th 10:30 am-12:50 pm	3		C. Levey
2487	CRIM.2030-031	Technology and the Criminal Justice System	>Online Course	3		K. Clarke
2490	CRIM.2130-031	Emergency Management	>Online Course	3		G. Gordon
2492	CRIM.2210-011	Criminology	T/Th 6:00-8:50 pm	3		Dept. Faculty
2501	CRIM.2210-031	Criminology	>Online Course	3		L. Boyd
2505	CRIM.2340-031	Criminal Law	>Online Course	3		S. Zane
2512	CRIM.2480-031	Terrorism (international and domestic)	>Online Course	3		J. Forest
2516	CRIM.3260-061	Hate Crimes	>Online Course	3		K. Jordan
2518	CRIM.3270-031	Violence in America	>Online Course	3		F. Spina
2520	CRIM.3420-031	Criminal Profiling	>Online Course	3		D. Carkin
2524	CRIM.3600-011	Gender, Race, and Crime	M/W 6:00-8:50 pm	3		K. Wallace
2529	CRIM.3600-061	Gender, Race, and Crime	>Online Course	3		G. Beaudoin
2535	CRIM.3880-011	Forensic Psychopathology	M/W/Th 1:00-3:20 pm	3		C. Levey
2537	CRIM.3900-011	Criminal Justice Research Methods	T/Th 6:00-8:50 pm	3		R. Maroun
2540	CRIM.3900-031	Criminal Justice Research Methods	>Online Course	3		K. Socia
2553	CRIM.3950-011	Statistics in Criminal Justice	T/Th 6:00-8:50 pm	3		A. Butterfield
2555	CRIM.3950-031	Statistics in Criminal Justice	>Online Course	3		P. McCormack
3423	CRIM.3970-031	Crime Mapping	>Online Course	3		S. Walfield
2559	CRIM.3980-031	Criminal Justice Data Analysis	>Online Course	3		A. Callahan
2561	CRIM.4010-031	Substance Abuse and Crime	>Online Course	3		S. Walfield
2563	CRIM.4780-031	Child Maltreatment	>Online Course	3		E. Weeks
2564	CRIM.4960-011	Criminal Justice Internship	TBA	3	Junior or Senior Status	R. Corbett

For permission numbers and questions regarding the Undergraduate Criminal Justice Program, please email Philip\_McCormack@uml.edu

DATABASE MANAGEMENT TECHNOLOGIES

(See Courses Listed Under Information Technology)

ECONOMICS

2544	ECON.2010-011	Economics I (Microeconomics)	M/W 6:00-8:50 pm	3		H. Khosla
2544	ECON.2010-011	Economics I (Microeconomics)	M/W 6:00-8:50 pm	3		H. Khosla
2547	ECON.2010-061	Economics I (Microeconomics)	>Online Course	3		G. Lyn
2548	ECON.2010-062	Economics I (Microeconomics)	>Online Course	3		D. Kingsley
2549	ECON.2010-063	Economics I (Microeconomics)	>Online Course	3		M. Carter
2550	ECON.2010-064	Economics I (Microeconomics)	>Online Course	3		N. Aman
2560	ECON.2020-011	Economics II (Macroeconomics)	M/W 6:00-8:50 pm	3		P. Machado
2659	ECON.2020-061	Economics II (Macroeconomics)	>Online Course	3		T. Tempesti
2660	ECON.2020-062	Economics II (Macroeconomics)	>Online Course	3		M. Carter
2661	ECON.2020-063	Economics II (Macroeconomics)	>Online Course	3		N. Aman
2662	ECON.2110-011	Statistics for Business and Economics I	T/Th 6:00-8:50 pm	3	P: MATH.1220 or equivalent	K. Khosla
2663	ECON.2110-061	Statistics for Business and Economics I	>Online Course	3	P: MATH.1220 or equivalent	M. Quayes
2664	ECON.3030-061	Microeconomic Theory	>Online Course	3	P: ECON.2010	M. Quayes
2665	ECON.3040-061	Macroeconomic Theory	>Online Course	3	P: ECON.2020	S. Smirnov
3386	ECON.3160-061	Investments: Instruments and Strategies	>Online Course	3	P: ECON.2010	D. Ornsill
3387	ECON.3180-061	Financial Markets and Monetary Policy	>Online Course	3	P: ECON.2010 and ECON.2020	S. Smirnov
3388	ECON.3250-061	United States Economic History	>Online Course	3	P: ECON.2010, ECON.2020	Dept. Faculty

EDUCATION

3438	UTCH.2010-011	Knowing and Learning Math and Science	M/W 10:30 am-1:30 pm	3		E. Bobek
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ELECTRICAL AND COMPUTER ENGINEERING

3168	EECE.2010-085	Circuit Theory I	M/W 1:00-3:50 pm	3	P: PUBH.1320; C: EECE.2070	J. Palma
3170	EECE.2020-085	Circuit Theory II	M/W 1:00-3:50 pm	3	P: EECE.2010 C or better; C: EECE.2080	F. Tredeau
3172	EECE.2070-085	Basic Electrical Engineering Laboratory I	T/Th 8:00-10:50 am	2(3)	C: EECE.2010	M. Darish
3175	EECE.2080-085	Basic Electrical Engineering Laboratory II	T/Th 12:00-2:50 pm	2(3)	P: EECE.2070; C: EECE.2020	M. Darish
3176	EECE.2160-011	ECE Application Programming	M/W/Th 8:00-10:20 am	3	P: ENGN.1080	M. Geiger
3178	EECE.3110-085	Electronics I Laboratory	M/W 12:00-2:50 pm	2(4)	C: EECE.3650	M. Darish
3180	EECE.3170-011	Microprocessors Systems Design I	M/W/Th 10:30 am-12:50 pm	3	P: EECE.2650 and EECE.3650	M. Geiger
3181	EECE.3550-085	Electromechanics	M/W 9:00-11:50 am	3	P: EECE.2020, PHYS.1440	M. MahD
3183	EECE.3630-011	Introduction to Probability and Random Processes	M/W/Th 1:00-3:20 pm	3	P: EECE.3620	A. Bhatta
3184	EECE.3640-085	Engineering Mathematics	M/W 8:00-10:50 am	3	P: EECE.236,0 EECE.2010	F. Tredeau
3185	EECE.3650-085	Electronics I	M/W 9:00-11:50 pm	3	P: EECE.2020, PHYS.1440, MATH.2310	J. Palma
3187	EECE.3991-085	Capstone Proposal and Senior Level	M/W 8:00-10:50 am	3	P: EECE.3120, EECE.3170, EECE.3630, EECE.3660	M. Darish
3188	EECE.4130-085	Linear Feedback System	M/W 12:00-2:50 pm	3	P: EECE.3620, EECE.3640	M. MahD
3195	EECE.4280-011	Alternative Energy Sources	M/W 6:00-8:50 pm	3	P: Permission of instructor	Z. Salameh
3200	EECE.4290-011	Electric Vehicle Technology	T/Th 6:00-8:50 pm	3	P: Permission of instructor	Z. Salameh
3210	EECE.4610-011	Engineering Electromagnetics II	M/W/Th 10:30 am-12:50 pm	3	P: EECE.3600	X. Lu
3213	EECE.4740-061	Principles of Solid State Devices	>Online Course	3	P: EECE.3650	C. Armiento
3215	EECE.4830-011	Network Design: Principles, Protocols & Applications	M/W 6:00-8:50 pm	3	P: EECE.2160	A. Paradis
3216	EECE.4900-011	Fiber Optic Communication	T/Th 6:00-8:50 pm	3	P: EECE.3600, EECE.3620; or permission of instructor	X. Lu
3220	EECE.4991-051	Capstone Project	M/W/Th 6:00-8:50 pm	3	P: EECE.3990, EECE.4000	J. Palma

ELECTRONIC ENGINEERING TECHNOLOGY

2683	ETEC.2720-031	Introduction to Alternative Energy	>Online Course	3		D. Bowden
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SUMMER I UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
ENGLISH							
2484	ENGL.1010-031	College Writing I		>Online Course	3	P: Requires MS Word	E. Bingman
2489	ENGL.1010-032	College Writing I		>Online Course	3	P: Requires MS Word	J. Martin
2509	ENGL.1020-031	College Writing II		>Online Course	3	P: ENGL.1010; requires MS Word	R. Keating
2532	ENGL.1020-032	College Writing II		>Online Course	3	P: ENGL.1010; requires MS Word	C. Archer
2533	ENGL.1020-033	College Writing II		>Online Course	3	P: ENGL.1010; requires MS Word	G. Peartree
2536	ENGL.1020-034	College Writing II		>Online Course	3	P: ENGL.1010; requires MS Word	M. Salamone
3190	ENGL.2100-061	Drama		>Online Course	3		B. Saxton
3191	ENGL.2110-031	NEW! Poetry		>Online Course	3		D. Archibald
3192	ENGL.2120-061	The Short Story		>Online Course	3		J. VanderVeen
3193	ENGL.2120-061	The Short Story		>Online Course	3		T. Michaels
3194	ENGL.2160-061	Monsters, Apes and Nightmares		>Online Course	3		T. Avery
3196	ENGL.2170-061	The Horror Story		>Online Course	3	Requires MS Word	L. Mahoney
3543	ENGL.2170-062	The Horror Story		>Online Course	3	Requires MS Word	L. Mahoney
3197	ENGL.2240-061	Business Writing		>Online Course	3	P: ENGL.1020; requires MS Word	C. Perreault
3198	ENGL.2260-061	Technical and Scientific Communication		>Online Course	3	P: ENGL.1020	K. McIssac
3199	ENGL.2360-061	Science Fiction and Fantasy		>Online Course	3		K. Shrieves
3201	ENGL.2380-061	Introduction to Creative Writing		>Online Course	3		M. Thibodeau
3202	ENGL.2810-061	British Literary Traditions		>Online Course	3		M. Hurwitz
3203	ENGL.2980-061	NEW! Children's Literature		>Online Course	3		M. Juchniewicz
3204	ENGL.3020-031	Creative Writing: Fiction		>Online Course	3		A. Johnson
3205	ENGL.3350-061	American Women Novelists		>Online Course	3		J. Pruett
3206	ENGL.3700-061	Contemporary American Fiction		>Online Course	3		T. Tietchen
3208	ENGL.3820-061	Theatre History I		>Online Course	3		S. Barish
3211	ENGL.4010-031	NEW! Selected Authors: William Faulkner		>Online Course	3		A. Szczesiul
3209	ENGL.4240-061	Shakespeare II		>Online Course	3	P: ENGL.1020 or by instructor permission	K. Petersen
ENTREPRENEURSHIP & INNOVATION							
2607	ENTR.3610-061	Starting a New Venture		>Online Course	3		Y. Yang
ENVIRONMENTAL EARTH AND ATMOSPHERIC SCIENCES							
2551	ENVI.1150-011	Astronomy	T/Th	7:00-9:50 pm	3		A. O'Brien
2576	ENVI.1170L-011	Astronomy Lab	M/W	7:00-8:50 pm	1(2)		A. O'Brien
2556	GEOL.1010-011	General Geology	M/W/Th	10:30 am-12:45 pm	3		L. Weeden
2589	GEOL.1030L-011	General Geology Lab	T/Th	3:30-5:30 pm	1(2)		L. Weeden
FINANCE							
2757	FINA.3010-011	Financial Management	T/Th	6:30-9:20 pm	3	P: ACCT.2010, ECON.2010, ECON.2020; COM filter courses, BSBA Major or Business Minor/BSIT/ASIT with 54+ credits	N. Nguyen
2758	FINA.3010-061	Financial Management		>Online Course	3	P: ACCT.2010, ECON.2010, ECON.2020; COM filter courses, BSBA Major or Business Minor/BSIT/ASIT with 54+ credits	S. Freund
2762	FINA.3110-061	Introduction to Financial Statement Analysis		>Online Course	3	P: FINA.3010	R. Jain
2828	FINA.3210-011	Investments and Portfolio Analysis	T/Th	6:30-9:20 pm	3	P: COM filter courses; BSBA or Business Minor; requires Logarithm calculator	A. Rehman
2767	FINA.3210-061	Investments and Portfolio Analysis		>Online Course	3	P: COM filter courses; BSBA or Business Minor; requires Logarithm calculator	F. Andrews
2771	FINA.3310-011	Principles of Corporate Finance	M/W	6:30-9:20 pm	3	P: FINA.3010, FINA.3030, BSBA Majors	A. Rehman
2812	FINA.4410-061	NEW! Introduction to Financial Derivatives		>Online Course	3	P: FINA.3010, FINA.3210	S. Freund
GRAPHIC DESIGN AND DIGITAL IMAGING			(See courses listed under Art and Information Technology.)				
HEALTH							
2728	EXER.3050-001	NEW! Exercise Physiology I (Blended course: Held online and on UML campus. Face-to-Face meetings on Thursdays)	Thurs	10:15 am-12:15 pm	4	P: HSCI.1020, HSCI.1040, HSCI.2520, HSCI.2540	K. Coffey
2740	EXER.3560-001	Pharmacology	Wed	2:00-4:50 pm	3		D. Kiel
2741	EXER.4200-011	Advanced Study/Exercise Physiology	M/W	10:30 am-12:50 pm	3	Note: Blended course	Y. Wu
2685	HSCI.1010-011	Human Anatomy and Physiology I	T/Th	6:00-8:50 pm	3	C: HSCI.1030	P. Fierimonte
3379	HSCI.1021-061	Introduction to Public Health		>Online Course	3		N. Champagne
3380	HSCI.1021-062	Introduction to Public Health		>Online Course	3		N. Champagne
2689	HSCI.1030-011	Human Anatomy and Physiology Laboratory I	T/W/Th	11:00 am-2:00 pm	1(3)	C: HSCI.1010	K. Hammerstone
2703	HSCI.2510-011	Physiological Chemistry I	M/W	10:00 am-12:00 pm 1:00-3:00 pm	3	C: HSCI.2530; P: HSCI.1020	J. Horta
2712	HSCI.2530-011	Physiological Chemistry Laboratory I	T/Th	10:00 am-1:00 pm	1(3)	C: HSCI.2510	B. Geiger
3390	HSCI.3060-031	Introduction to Gerontology		>Online Course	3		R. Gautam
3450	HSCI.3080-011	Global Health	M/W/Th	9:00-11:20 am	3		M. Brunette
3381	HSCI.3200-031	Legal Issues in Nursing		>Online Course	3		P. Ladebauche
2719	HSCI.3500-011	Human Biochemistry	M/W/Th	10:30 am-12:45 pm	3	P: HSCI.2520	T. Wilson
3300	MLSC.3610-011	Clinical Laboratory Instrumentation	M/W/Th	1:00-3:15 pm	3	C: MLSC.3630	M. Garelnabi
2692	NUTR.2060-011	Human Nutrition	M/W/Th	4:00-6:20 pm	3		M. Keyes
2693	NUTR.2100-011	Nutrition and Health	M/W/Th	10:30-12:50 pm	3		M. Keyes
2694	NUTR.2100-012	Nutrition and Health	M/W/Th	1:00-3:20 pm	3		M. Keyes
3304	MLSC.3630-011	Clinical Laboratory Instrumentation	M/W	3:30-7:20 pm	2(4)	C: MLSC.3610	M. Garelnabi
HISTORY							
3330	HIST.1050-031	Western Civilization I		>Online Course	3		A. Drenas
3331	HIST.1070-061	World Civilization I		>Online Course	3		D. Kalivas
3348	HIST.1120-011	United States History since 1877	T/Th	6:30-9:20 pm	3		S. Russell
3332	HIST.1120-031	United States History since 1877		>Online Course	3		M. Pratschke
3333	HIST.2420-061	World War II		>Online Course	3		D. Mattheisen
3516	HIST.2750-031	African-American History		>Online Course	3		L. Vox
3513	HIST.3490-011	The Cuban Revolution	M/W/Th	8:00-10:20 am	3		L. Edwards
3512	HIST.3520-011	The Coming of the American Revolution	M/W	6:00-8:50 pm	3		R. Lemire
3508	HIST.3560-031	Civil War and Reconstruction		>Online Course	3		D. Driscoll
3337	HIST.3730-031	Nazi Germany		>Online Course	3		W. Hoerle
HONORS							
3377	HONR.3200-011	Special Topics in Honors: Creativity and Innovation	M/W/Th	8:00-10:20 am	3		D. Finch
INFORMATION TECHNOLOGY			(Including Multimedia and Computer Graphics)				
2568	INFO.1600-061	Introduction to Information Systems		>Online Course	3		L. Panagopoulos
2570	INFO.1600-062	Introduction to Information Systems		>Online Course	3		A. Garside
2572	INFO.1710-031	Application Software: Microsoft® Access		>Online Course	3		H. Shanzer



# SUMMER I UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
2574	INFO.1800-061	Applications Software: Microsoft® Excel	>Online Course	3	P: INFO.2020 or equivalent; requires MS® Excel 2010; Windows based	R. Desmond
2577	INFO.2020-011	Microsoft® Office	T/Th 6:00-8:50 pm	3	Requires MS Office 2013: Windows based	T. Bass
2575	INFO.2020-061	Microsoft® Office	>Online Course	3	Requires MS Office 2013: Windows based	R. Desmond
2578	INFO.2020-062	Microsoft® Office	>Online Course	3	Requires MS Office 2013: Windows based	T. Bass
2580	INFO.2110-061	Introduction to Programming with C Part I	>Online Course	3	No previous programming. experience required; ANSI C/C++ standard compiler required	J. Sears
2579	INFO.2110-062	Introduction to Programming with C Part I	>Online Course	3	No previous programming. experience required; ANSI C/C++ standard compiler required	B. Moscon
2581	INFO.2120-061	Introduction to Programming with C Part II	>Online Course	3	P: INFO.2110; requires ANSI C/C++ standard compiler	J. Sears
2583	INFO.2120-062	Introduction to Programming with C Part II	>Online Course	3	P: INFO.2110; requires ANSI C/C++ standard compiler	B. Mascon
2586	INFO.2200L-061	Visual Basic	>Online Course	3		A. Garside
2587	INFO.2250-031	Survey of Programming Languages	>Online Course	3	P: Working knowledge of at least one higher level programming language; requires ANSI C/C++ standard compiler	T. Niesen
2590	INFO.2300-061	Introduction to Multimedia	>Online Course	3		M. Lucas
2591	INFO.2310-031	Graphics for Multimedia and the World Wide Web	>Online Course	3	P: INFO.2300	R. Howe
2593	INFO.2380-031 <b>NEW!</b>	Website Development: Adobe Dreamweaver (Held May 16-Aug 6 with a two week break: June 19-July 3)	>Online Course	3	P: INFO.2910; INFO.2310 recommended. Requires Adobe Dreamweaver**	E. Hutchings
2596	INFO.2480-061	Website Database Implementation	>Online Course	3	P: INFO.1710 and INFO.2200; or equivalent background	D. Card
2598	INFO.2500-061	E-Commerce	>Online Course	3		A. Banafa
2600	INFO.2670-061	C Programming	>Online Course	3	P: Previous programming experience	T. Niesen
2602	INFO.2680-061	C++ Programming	>Online Course	3	P: INFO.2670 or INFO.2120; requires C++ compiler software	L. Smith
2604	INFO.2710-061	C# Programming	>Online Course	3	P: INFO.2680 or INFO.3010	T. Kostizak
2615	INFO.2910-061	Introduction to DHTML	>Online Course	3		W. Dubie
2616	INFO.2910-062	Introduction to DHTML	>Online Course	3		K. Wedge
2608	INFO.2970-061	Introduction to Java Programming	>Online Course	3	P: Previous programming experience required; requires J2SE Development Kit (JDK) 6.0 or higher	L. Smith
2617	INFO.3010-061	Java™ Programming/Windows	>Online Course	3	P: INFO.2970 or INFO.2680, req. Sun Java Dev. Kit	E. Kramer
2618	INFO.3020-061	JavaScript	>Online Course	3	P: INFO.2910 or knowledge of HTML	D. Sciuto
2619	INFO.3030-061	Advanced JAVA Programing	>Online Course	3		S. Marks
3076	INFO.3040-031 <b>NEW!</b>	JAVA Web Development	>Online Course	3		L. Xia
2620	INFO.3050-061	Survey of Perl/Python/PHP	>Online Course	3		S. Marks
2621	INFO.3060-061	Introduction to XML	>Online Course	3	P: INFO.2910	D. Sciuto
2623	INFO.3110-061	Introduction to the Linux/Unix Operating System	>Online Course	3		F. Vegliante
2622	INFO.3110-062	Introduction to the Linux/Unix Operating System	>Online Course	3		F. Vegliante
2624	INFO.3120-061	Shell Scripting	>Online Course	3	P: INFO.3110, and INFO.2670 or INFO.2120	M. Richards
2625	INFO.3210-061	LINUX/UNIX System Administration	>Online Course	3	P: Shell Scripting experience; required software with text	M. Richards
2626	INFO.3600-031	Introduction to Data Structures with C	>Online Course	3		T. Kostizak
2627	INFO.3640-031	Problem Solving with C	>Online Course	3		S. McGowan
2628	INFO.3850-061	Introduction to Information Security	>Online Course	3	P: INFO.1600 and INFO.2020, or equivalent	W. Vales
2630	INFO.4600-061	Computer Ethics	>Online Course	3		S. McGowan
2631	INFO.4610-061	LAN/WAN Technologies	>Online Course	3	P: INFO.2670 or previous programming experience	E. Barnes
2634	INFO.4610-062	LAN/WAN Technologies	>Online Course	3	P: INFO.2670 or previous programming experience	D. Root
2635	INFO.4620-061	TCP/IP and Network Architecture	>Online Course	3	P: INFO.4610	E. Barnes
2636	INFO.4640-061	Network Management	>Online Course	3	P: INFO.4610	D. Root
3078	INFO.4660-001	Oracle 11g Data Warehousing Intervals	Sat 1:00-4:00 pm	3	Only open to matriculated certificate students	L. Xia
2637	INFO.4740-031	Relational Database Concepts	>Online Course	3	P: INFO.2670	R. Demers
2638	INFO.4770-001	Information Systems I	Wed 6:30-9:20 pm	3		W. Chicoine
2639	INFO.4800-031	Project-Based Information Systems	>Online Course	6	P: Junior status; can be used to replace the sequence of INFO.4770 and INFO.4780	J. Forsyth
2652	INFO.4800-032	Project-Based Information Systems	>Online Course	6	P: Junior status; can be used to replace the sequence of INFO.4770 and INFO.4780	J. Forsyth
2565	COMP.1130-061	Exploring the Internet	>Online Course	3	Non-CS Majors only; requires access to a microphone	T. Watterson

Please note courses with a COMP- prefix can be used as Information Technology electives in the Information Technology program

\* Students will not receive credit for both INFO.2670 and the INFO.2110/INFO.2120 sequence.

\*\* Access to Adobe's Creative Cloud Software requires a \$19.99 monthly subscription (student rate). For details, please visit [www.adobe.com](http://www.adobe.com)

## LANGUAGES

2832	WLFR.1010-031	French 1 and Culture	>Online Course	3		D. Boutwell
2834	WLFR.1020-031	French 2 and Culture	>Online Course	3	P: WLFR.1010	T. Bentaous
2836	WLFR.2110-031	French 3 and Culture	>Online Course	3	P: WLFR.1020 or equivalent	D. Boutwell
2837	WLFR.2120-061	French 4 and Culture	>Online Course	3	P: WLFR.2110 or equivalent	C. Salmon
2840	WLSP.1010-061	Spanish 1 and Culture	>Online Course	3		K. Vitchkoski
2852	WLSP.1010-062	Spanish 1 and Culture	>Online Course	3		B. Alvarado
2855	WLSP.1020-061	Spanish 2 and Culture	>Online Course	3	P: WLSP.1010 or equivalent	K. Vitchkoski
2859	WLSP.1020-062	Spanish 2 and Culture	>Online Course	3	P: WLSP.1010 or equivalent	E. Legere
2860	WLSP.2110-061	Spanish 3 and Culture	>Online Course	3	P: WLSP.1020 or equivalent; requires headset	F. Gonzalez-Arias
2861	WLSP.2110-062	Spanish 3 and Culture	>Online Course	3	P: WLSP.1020 or equivalent; requires headset	M. Matz
2862	WLSP.2120-061	Spanish 4 and Culture	>Online Course	3	P: WLSP.2110 or equivalent; requires headset	F. Gonzalez-Arias
2867	WLSP.2120-062	Spanish 4 and Culture	>Online Course	3	P: WLSP.2110 or equivalent; requires headset	B. Alvarado

## LEGAL STUDIES AND PARALEGAL STUDIES

2869	LGST.1030-011	Introduction to Paralegal Studies	T/Th 6:00-9:30 pm	3		P. King
2871	LGST.1030-061	Introduction to Paralegal Studies	>Online Course	3		D. Banfield
2872	LGST.2610-031	Introduction to Legal Concepts	>Online Course	3		M. Jones
2875	LGST.2620-061	Introduction to Business Law	>Online Course	3		W. Toomey
2876	LGST.3700-061	Real Estate Law	>Online Course	3		P. Sullivan Talty
2884	LGST.3760-061	Family Law	>Online Course	3		M. Bazin
2892	LGST.3870-061	Legal Research Methods	>Online Course	3	Requires MS Word	M. Aiken
2894	LGST.3900-061	Litigation	>Online Course	3		E. Curran
2896	LGST.3920-061	Wills, Trusts and Estates	>Online Course	3		W. Toomey
2899	LGST.4970-001	The Paralegal Practicum	TBA	3		M. Bazin

## MANAGEMENT

3384	BUSI.1500-051	Business 101	M/W/Th 10:30 am-12:00 pm	3		D. Finch
2865	BUSI.3800-011	Business Ethics	M/W 6:00-8:50 pm	3		E. Magnant
2866	BUSI.3800-061	Business Ethics	>Online Course	3		E. Magnant
2863	MGMT.3010-081	Organizational Behavior	>Online Course	3	P: MSB filter courses; or Business minor and ACCT.2010 and ECON.2010	S. Freedman
2864	MGMT.3100-081	Human Resources Management	>Online Course	3	P: MGMT.3010; preference MG concentrators	B. Hargreaves-Heald
2870	MGMT.4900-011	Strategic Management	M/W 6:00-8:50 pm	3	P: Graduating seniors only; FINA.3010, MKTG.2010, MIST.2010, POMS.3010, MGMT.3010, BSBA students	M. Salach
2873	MGMT.4900-061	Strategic Management	>Online Course	3	P: Graduating seniors only; FINA.3010, MKTG.2010, MIST.2010, POMS.3010, MGMT.3010, BSBA students	M. Salach



# SUMMER I UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
MARKETING						
2641	MKTG.2010-011	Marketing Principles	T/Th 6:00-8:50 pm	3	P: PSYC.1010, SOCI.1010, ECON.2010	T. Morgan
2642	MKTG.2010-061	Marketing Principles	>Online Course	3	P: PSYC.1010, SOCI.1010, ECON.2010	J. Crooker
2644	MKTG.2100-011	Professional Communications	M/W/Th 8:00-10:20 am	3	P: BA, BBA majors	L. Mallen
2645	MKTG.2100-061	Professional Communications	>Online Course	3	P: BA, BBA majors	D. Casey
3541	MKTG.3130-061	Sales and Customer Relations	>Online Course	3	P: MKTG.201; COM Filter	S. Powell
2647	MKTG.3150-011	New Product and Service Management	M/W/ 6:00-8:50 pm	3	P: MKTG.2010, COM Filter; preference marketing concentrators	M. Obal
3542	MKTG.4020-061	Buyer Behavior	>Online Course	3	P: MKTG.2010	D. Casey
2648	MKTG.4070-061	Retailing	>Online Course	3	P: MKTG.2010	Y. Huang
2649	MKTG.4110-061	Marketing Analytics	>Online Course	3	P: MKTG.2010, COM Filter; preference marketing concentrators	M. Talay
2650	MKTG.4120-061	Global Marketing	>Online Course	3		Y. Huang
2651	MKTG.4960-011	NEW! Current Topics in Marketing: Social Media Marketing	M/W 6:00-8:50 pm	3	P: MKTG.2010; COM Filter	J. Crooker
MATHEMATICS						
2744	MATH.1200-061	Precalculus Mathematics I	>Online Course	3	P: Satisfactory score on the Math Placement Exam given the first week of class	A. Doerr
2745	MATH.1210-011	Management Precalculus	M/W/Th 8:00-10:20 am	3	MA	Z. Fardmanesh-Karimy
2746	MATH.1220-011	Management Calculus	M/W/Th 10:30 am-12:50 pm	3	P: MATH.1190 or MATH.1200 or MATH.1210 or not for equivalent; science or engineering majors; MA	Z. Fardmanesh-Karimy
2749	MATH.1220-031	Management Calculus	>Online Course	3	P: MATH.1190 or MATH.1200 or MATH.1210 or not for equivalent; science or engineering majors; MA	M. Stick
2750	MATH.1250-011	Calculus A	M/W 6:00-8:50 pm	3	P: MATH.1230; MA	T. Schille
2753	MATH.1290-011	Calculus IB	M-F 10:30 am-12:20 pm	4	P: MATH.1280; MA, for UML day students only	S. Yeh
2755	MATH.1310-011	Calculus I	M-F 8:00-9:50 am	4	MA	J. Lahoud
2760	MATH.1310-012	Calculus I	M-F 10:30 am-12:20 pm	4	MA	J. Lahoud
2766	MATH.1320-011	Calculus II	M-F 8:00-9:50 am	4	P: MATH.1310; MA	M. Stick
2776	MATH.1320-012	Calculus II	M-F 10:30 am-12:20 pm	4	P: MATH.1310; MA	R. Brent
2777	MATH.1320-013	Calculus II	M-F 10:30 am-12:20 pm	4	P MATH.1310; MA	J. Weston
3573	MATH.2310-001	Calculus III	M/W 1:00-2:50 pm Fri 1:00-2:00 pm	4	P MATH.1320	J. Weston
2789	MATH.2310-011	Calculus III	M-F 8:00-9:50 am	4	P: MATH.1320	C. Ormsby
2790	MATH.2310-012	Calculus III	M-F 10:30 am-12:20 pm	4	P: MATH.1320	V. Prasad
2795	MATH.2340-011	Differential Equations	M/W 6:00-8:50 pm	3	P: MATH.2250 or MATH.1320	R. Mirie
2799	MATH.2360-011	Engineering Differential Equations	M-F 8:00-9:50 am	3(4)	P: MATH.2250 or MATH.1320	V. Prasad
2801	MATH.2830-011	Introduction to Statistics	M/W/Th 8:00-10:20 am	3	P: MATH.1200 or equivalent; MA	A. Olsen
2809	MATH.2830-012	Introduction to Statistics	M/W 6:00-8:50 pm	3	P: MATH.1200 or equivalent; MA	A. Olsen
2814	MATH.2830-031	Introduction to Statistics	>Online Course	3	P: MATH.1200 or equivalent; MA	H. Troughton
2816	MATH.2830-032	Introduction to Statistics	>Online Course	3	P: MATH.1200 or equivalent; MA	H. Troughton
2819	MATH.2830-033	Introduction to Statistics	>Online Course	3	P: MATH.1200 or equivalent; MA	C. Fournier
2820	MATH.2830-034	Introduction to Statistics	>Online Course	3	P: MATH.1200 or equivalent; MA	C. Fournier
2821	MATH.3210-011	Discrete Structures I	M/W 6:00-8:50 pm	3	P: MATH.1310	A. Penta
2823	MATH.3210-031	Discrete Structures I	>Online Course	3	P: MATH.1310	R. Montenegro
2825	MATH.3210-061	Discrete Structures I	>Online Course	3	P: MATH.1310	A. Doerr
2826	MATH.3220-011	Discrete Structures II	M/W/Th 10:30 am-12:50 pm	3	P: MATH.1310	R. Montenegro
2827	MATH.3860-011	Probability and Statistics I	M/W 6:00-8:50 pm	3	P: MATH.2250 or MATH.1320	C. Venkatesh
2829	MATH.3860-012	Probability and Statistics I	M/W/Th 1:00-3:20 pm	3	P: MATH.2250 or MATH.1320	R. Montenegro
2830	MATH.4130-011	Mathematical Problem Solving	M/W 6:00-8:50 pm	3	P: MATH.2210 OR MATH.3210	K. Levasserurr
2831	MATH.4210-011	Abstract Algebra	T/Th 6:00-8:50 pm	3	P: MATH.2210	A. Doerr
2835	MATH.4500-001	Mathematical Modeling	Mon 3:00-5:50 pm	3	P: MATH.2340 or MATH.2360	J. Eagle-Graham
2838	MATH.4750-011	Senior Seminar II	TBA	3	P: 93.2310 or permission of instructor	R. Montenegro
**Credit is given for only one of the two following courses: MATH.1200 or MATH.1210. Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. See the graduate mathematics course listings on the Registrar's web page.						
MECHANICAL ENGINEERING						
2742	ENGN.2050-011	Statics	M/W/Th 10:30 am-12:50 pm	3	P: PHYS.1410; C: MATH.1320	E. Hajduk
2684	ENGN.2060-011	Strength of Materials	M/W/Th 10:30 am-12:50 pm	3	P: ENGN.2050 and MATH.1320	D. Sullivan
2748	ENGN.2060-012	Strength of Materials	M/W/Th 8:00-10:20 am	3	P: ENGN.2050 and MATH.1320	E. Hajduk
2754	ENGN.2070-011	Dynamics	W/Th 10:30 am-12:50 pm	3	P: ENGN.2050 and MATH.1320	S. Pagsuyoin
2695	MECH.2420-011	Thermodynamics	M/W/Th 3:30-5:50 pm	3	P: MATH.1320 or MATH.1420 and PHYS.2450 and CHEM.1210 or CHEM.1350	E. Niemi
2701	MECH.3210-011L	Kinematics of Mechanisms Students enrolling in O11L and O12L will automatically be enrolled in recitation	M/T/Th 8:00-10:00 am	3(4)	P: MECH.2130; C: MECH.2010	J. Gorczyca
2702	MECH.3210-012L	Kinematics of Mechanisms Students enrolling in O11L and O12L will automatically be enrolled in recitation	M/T/Th 1:00-3:00 pm	3(4)	P: MECH.2130; C: MECH.2010	L. Thompson
2705	MECH.3210-011	Kinematics of Mechanisms	M-W 3:15-5:15 pm	0	P: ENGN.2070; C: MECH.2010	J. Gorczyca/ L. Thompson
2707	MECH.3220-011	Control of Mechanical Systems	T/Th 6:00-9:15 pm	3	P: MECH.3210	K. Fetfatsidis
2708	MECH.3610-011	Mathematical Methods for Mechanical Engineers	M/W/Th 10:30 am-12:45 pm	3	P: MATH.1320	R. Darlington
2709	MECH.3810-011	Fluid Mechanics	M/W/Th 10:30 am-12:50 pm	3	P: MECH.2130, MECH.2420, MATH.2310, MATH.2360	Dept. Faculty
2711	MECH.4030-011	Thermal Fluids Laboratory	M/W/Th 1:00-4:00 pm	3(4)	P: MECH.3020, MECH.3110, MECH.3410, MECH.3810	D. Sullivan
2713	MECH.4250-011	Design of Machine Elements	M/W/Th 10:30 am-12:50 pm	3	P: MECH.3110, MECH.2960 and MECH.3220	L. Thompson
3425	MECH.4410-011	Thermo-fluid Applications	M/W/Th 8:00-10:20 am	3	P: MECH.4410	I. Kakhki
NURSING (See also Health)						
3381	HSCI.3200-031	Legal Issues in Nursing	>Online Course	3		P. Ladebauche
3434	NURS.3010-011	Research in Nursing and Health Care (Blended course, Held online and on UML campus.)	Tues 1:00-4:00 pm	3		M. Knight
OPERATIONS AND INFORMATION SYSTEMS						
2764	MIST.2010-011	Business Information Systems	M/W/Th 1:00-3:25 pm	3		X. Liu
2769	MIST.2010-061	Business Information Systems	>Online Course	3		J. Zhang
2787	POMS.2010-011	Managerial Decision Making	M/W/T 8:00-10:20 am	3	P: ECON.2110 or MATH.1830 or MATH.2830	M. Vaid
2800	POMS.2010-061	Managerial Decision Making	>Online Course	3	P: ECON.2110 or MATH.1830 or MATH.2830	M. Vaid
2805	POMS.3010-081	Operations Management	>Online Course	3	P: POMS.2010	M. Khan
PARALEGAL STUDIES (See also Legal Studies)						
PEACE AND CONFLICT STUDIES						
2756	PCST.4750-011	Community Conflict Resolution	T/Th 6:00-8:50 pm	3		D. Turcotte/ M. Zapata-Turcotte
PHILOSOPHY						
3231	PHIL.2010-011	Introduction to Philosophy	M/W/Th 10:30 am-12:50 pm	3		J. Kaag
3232	PHIL.2010-061	Introduction to Philosophy	>Online Course	3		D. LeBlanc
3240	PHIL.2020-011	Introduction to Logic and Critical Reasoning	M/W/Th 10:30 am-12:50 pm	3		J. Mendoza
3237	PHIL.2020-031	Introduction to Logic and Critical Reasoning	>Online Course	3		C. Hodapp
3252	PHIL.2030-011	Introduction to Ethics	M/W/Th 10:30 am-12:50 pm	3		C. Hay



SUMMER I UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
3257	PHIL.2030-031	Introduction to Ethics		>Online Course	3		C. Phillips
3258	PHIL.2030-032	Introduction to Ethics		>Online Course	3		D. White
3260	PHIL.2960-031	Introduction to World Religions		>Online Course	3		W. Kaufman
3261	PHIL.3340-061	Engineering and Ethics		>Online Course	3		H. Furey
3262	PHIL.3750-061	Philosophy of Sex and Love		>Online Course	3		C. Hay
3424	PHIL.3880-061	NEW! Latin American Philosophy		>Online Course	3		J. Mendoza
PHYSICS							
3234	PHYS.1030-011	General Physics I	M-F	8:00-9:50 am	3(4)	C: PHYS.1030	A. Mittler
3238	PHYS.1410-011	Physics I	M-F	8:00-9:50 am	3(4)	C: MATH.1310, PHYS.1410	R. Hardy
3241	PHYS.1440-011	Physics II	M-F	8:00-9:50 am	3(4)	P: PHYS.1410. C: MATH.1320, PHYS.1440	K. Sebastian
3243	PHYS.1030L-011	General Physics I Lab	M/Th	10:30 am-1:20 pm	1(2)	C: PHYS.1030 or PHYS.2010	A. Mittler
3244	PHYS.1030L-012	General Physics I Lab	W/F	10:30 am-1:20 pm	1(2)	C: PHYS.1030 or PHYS.2010	Dept. Faculty
3248	PHYS.1410L-011	Physics I Lab	W/F	10:30 am-1:20 pm	1(2)	C: PHYS.1410	R. Hardy
3483	PHYS.1410L-012	Physics I Lab	M/Th	10:30-1:20 pm	1(2)	C: PHYS.1410	Dept. Faculty
3253	PHYS.1440L-011	Physics II Lab	W/F	10:30 am-1:20 pm	1(2)	P: PHYS.1410L. C: PHYS.1440	Dept. Faculty
3256	RADI.1010-061	Radiation and Life		>Online Course	3		T. Regan
PLASTICS							
2783	PTEC.4510-011	Selected Topics I	M/W	7:00-9:50 pm	3		S. Driscoll
2788	PTEC.4520-011	Selected Topics II	M/W	7:00-9:50 pm	3		S. Driscoll
POLITICAL SCIENCE							
3401	POLI.1010-001	Introduction to American Politics	M/W	1:00-2:50 pm	3		M. Marietta
2842	POLI.1010-011	Introduction to American Politics	M/W/Th	10:30 am-12:50 pm	3		G. Anthes
2847	POLI.1010-061	Introduction to American Politics		>Online Course	3		J. Carter
2849	POLI.1120-061	Introduction to Comparative Political System		>Online Course	3		A. Duran-Martinez
2850	POLI.1210-061	Introduction to International Relations		>Online Course	3		J. Carter
2853	POLI.2180-061	Introduction to Politics and Sports		>Online Course	3		J. Gerson/R. Borges
2854	POLI.2300-061	Law and the Legal System		>Online Course	3		P. Talty
2856	POLI.3130-061	Electoral Politics		>Online Course	3		J. Dyck
2857	POLI.3160-061	Politics and Film		>Online Course	3		J. Gerson
2858	POLI.3240-061	Politics of Football		>Online Course	3		R. Borges
PSYCHOLOGY							
2929	PSYC.1010-011	Introduction to Psychological Science*	M/W/Th	1:00-3:50 pm	3	Requires MS Word	D. Cruz
2931	PSYC.1010-061	Introduction to Psychological Science*		>Online Course	3	Requires MS Word	J. Kendrick
2932	PSYC.1010-062	Introduction to Psychological Science*		>Online Course	3	Requires MS Word	S. Cappello
2934	PSYC.2320-061	Psychology of Personality		>Online Course	3	P: or C: PSYC.1010; requires MS Word	J. Kendrick
2935	PSYC.2550-061	Community Psychology		>Online Course	3	P: or C: PSYC.1010	E. Sanborne
2936	PSYC.2600-011	Child and Adolescent Development	T/Th	6:00-8:50 pm	3	P: or C: PSYC.1010	C. Davy
2937	PSYC.2600-061	Child and Adolescent Development		>Online Course	3	P: or C: PSYC.1010	P. Trela
2938	PSYC.2690-011	Research I: Methods	M/W/Th	10:30 am-12:50 pm	3	P: PSYC.1010	A. Frye
2939	PSYC.2690-061	Research I: Methods		>Online Course	3	P: PSYC.1010	D. Arcus
2940	PSYC.2720-011	Abnormal Psychology	M/W/Th	8:00-10:20 am	3	P: PSYC.1010	A. Crowley
2941	PSYC.2720-061	Abnormal Psychology		>Online Course	3	P: PSYC.1010	J.Theriault
2942	PSYC.2730-061	Brain, Mind and Behavior		>Online Course	3	P: PSYC.1010	M. Duell
2943	PSYC.2780-061	Cognitive Psychology		>Online Course	3	P: PSYC.1010	Y. Weinstein
2945	PSYC.3050-061	Psychology and Law		>Online Course	3	P: PSYC.1010	S. Block
2948	PSYC.3350-061	Psychology and Women		>Online Course	3	P: PSYC.1010	M. Drake
2950	PSYC.3450-011	Health Psychology	M/W/Th	1:00-3:50 pm	3	P: PSYC.1010	S. Underwood
2951	PSYC.3510-061	Human Sexuality		>Online Course	3	P: PSYC.1010	M. Duell
2953	PSYC.3600-061	Adult Development and Aging		>Online Course	3	P: PSYC.1010, and PSYC.2600 or equivalent	M. Stanford-Pollock
2954	PSYC.3610-061	Developmental Psychopathology		>Online Course	3	P: PSYC.1010, and PSYC.2600 or equivalent	K. Leonard
2955	PSYC.3630-061	Introduction to Disability Studies		>Online Course	3	P: PSYC.1010	K. Fox
2956	PSYC.3690-031	Research II: Statistics		>Online Course	3	P: PSYC.1010, grade of C or better in PSYC.2690	A. Frye
2957	PSYC.3750-011	Research III Laboratory	M/W/Th	10:30 am-12:50 pm	3	P: PSYC.2690, PSYC.3690	C. Allen
2959	PSYC.3750-031	Research III: Laboratory		>Online Course	3	P: PSYC.2690, PSYC.3690	M. Duell
2960	PSYC.4730-011	Seminar in Social Psychology: Positive Psychology (Blended course: Held online and on UML campus. Face-to-Face meetings on Wednesdays. Online held on Tuesdays and Thursdays)	Wed	1:00-3:20 pm	3	P: PSYC.1010, and PSYC.2690 or equivalent	M. Stanford-Pollock
2961	PSYC.4730-061	Seminar in Social Psychology: Social (In) Justice		>Online Course	3	P: PSYC.1010, and PSYC.2690 or equivalent	J. Sladkova
2964	PSYC.4770-061	Seminar in Contemporary Trends: Addictions		>Online Course	3	P: PSYC.1010; and PSYC.2690 or equivalent	R. Siegel
*Formerly General Psychology							
SOCIOLOGY							
2891	SOCI.1010-061	Introduction to Sociology		>Online Course	3		M. Slone
2893	SOCI.1120-011	Sociology Goes to the Movies	M/W	7:00-9:50 pm	3		W. Lekas
2895	SOCI.2120-061	Cultures of the World		>Online Course	3		D. Lamar
2897	SOCI.2160-011	Sociology of War and Peace	M/W/Th	10:30 am-12:50 pm	3	P: SOCI.1010	R. Hudak
2898	SOCI.2200-061	Self-Assessment and Career Development		>Online Course	3		M. Drake
2902	SOCI.3030-011	Sociology of American Education	M/W/Th	8:00-10:20 am	3	P: SOCI.1010	J. Ellis
2903	SOCI.3450-061	Urban Sociology		>Online Course	3	P: SOCI.1010	D. Lamar
2904	SOCI.3510-031	Sociology of Health and Health Care		>Online Course	3	P: SOCI.1010	J. Ost
2905	SOCI.3710-061	Sociology of Work		>Online Course	3	P: SOCI.1010	M. Slone
2919	SOCI.3800-061	NEW! Sociology of Mass Media		>Online Course	3	P: SOCI.1010	N. Coleman
STUDIO ART							
(See also Art and Art History)							
2542	AEST.3600-011	NEW! Aesthetics and Critical Studies of Graphic Design	M-Th	9:00 am-12:00 pm	3	P: ARHI.2040, or Studio Art minor, or Art minor	J. Hess
2725	ARTS.2610-011	Photography I	M-Th	9:00 am-3:00 pm	3(6)	P: ARTS.1010, ARTS.1020, ARTS.1550, ARTS.1130, ARTS.1560, ARTS.2010	P. Romaniko
2656	ARTS.2710-001	Painting I	T/Th	6:00-8:50 pm	3(6)	P: ARTS.1010, ARTS.1020, ARTS.1550, ARTS.1130, ARTS.1560, ARTS.2010	S. Mishol
WEBSITE DESIGN AND DEVELOPMENT							
(See courses listed under Information Technology)							

Summer Session II

Classes Begin  
July 6, 2016

Summer II On Campus (-021): July 6–August 16, 2016

Except as noted: Classes begin on July 6.  
M/W Classes begin on Wednesday, July 6 and include 3 FRIDAYS: July 8, July 22 and August 5 at the regularly scheduled hours.  
T/Th Classes begin on Thursday, July 7 and include 3 FRIDAYS: July 15 and July 29 and August 12 at the regularly scheduled hours.

Please check course numbers and prerequisites to ensure enrollment in the correct class.

ACCOUNTING

2511 ACCT.4210-021 Auditing T/Th 6:00-8:50 pm 3 P: ACCT.3030 C. Carney



# SUMMER II UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>BIOLOGICAL SCIENCES</b>							
3264	BIOL.1120-021	Principles of Biology II	M/T/Th	8:00-10:20 am	3		N. Wernick
3268	BIOL.1180L-021	Experimental Biology II	W/Th	11:00-11:50 am W/Th 1:00-3:50 pm	1(4)		B. Hubbard
3275	BIOL. 2330L-021	Experimental Methods in Biology	T/F	11:00 am-11:50 am T/F 1:00-4:50 pm	(2) 3	P: BIOL.1180L	J. Choo
3271	BIOL.2400-011	Evolution, Ecology & Conservation	M/W/Th	10:30 am-12:45 pm	3	P: BIOL.1110, BIOL.1120; C: BIOL.2420	W. Savage
3272	BIOL.2420-011	Problems in Evolution, Ecology & Conservation	M/W	1:00-3:20 pm	1 (3)	C: BIOL.2400	W. Savage
3288	LIFE.1010-021	Life Science I	T/Th	6:30-9:30 pm	3		M. Fannon
<b>CHEMISTRY</b>							
2531	CHEM.1010-021	Applied Chemistry for Non-Scientists	M/W	7:00-9:50 pm	3		G. Davis
2539	CHEM.1120-021	General Chemistry II	T/Th	7:00-9:50 pm	3	P: CHEM.1110 or permission of instructor; C: CHEM.1140	D. Lavoie
2538	CHEM.1140L-021	General Chemistry Laboratory II	T/Th	3:30-6:20 pm	1(3)	P: CHEM.1130 or permission of instructor; C: CHEM.1120	K. Shih
2543	CHEM.1220-021	Chemistry II	M/W	2:00-5:15 pm	3(4)	P: CHEM.1210 and CHEM.1230. C: CHEM.1240	G. Davis
2546	CHEM.1220-022	Chemistry II	M/W	6:00-9:50 pm	3(4)	P: CHEM.1210 and CHEM.1230. C: CHEM.1240	J. Horta
2552	CHEM.1240L-021	Chemistry II Laboratory	T/Th	7:00-9:50 pm	1(3)	P: CHEM.1230; C: CHEM.1220	G. Gajnos
2554	CHEM.1240L-022	Chemistry II Laboratory	T/Th	7:00-9:50 pm	1(3)	C: CHEM.1220	D. Pyburn
2558	CHEM.2220-021	Organic Chemistry IIA	M-Th	5:30-8:00 pm	3(4)	P: CHEM.2210; C: CHEM.2300	K. Reddie
2562	CHEM.2300L-021	Organic Chemistry II B Laboratory	M/W	1:00-5:00 pm	1(3)	P: CHEM.2290; C: CHEM.2220	J. Garcia
2614	CHEM.2300L-022	Organic Chemistry II B Laboratory	T/Th	1:00-5:00 pm	1(3)	P: CHEM.2290; C: CHEM.2220	J. Garcia
<b>CIVIL ENGINEERING</b>							
2681	ENGN.2050-021	Statics	M/W/Th	1:00-3:20 pm	3	P: PHYS.1410; C: MATH.1320	F. Jamil
3095	ENGN.2060-021	Strength of Materials	M/W/Th	8:00-10:20 am	3	P: ENGN.2050 and MATH.1320	J. McKelliget
2688	ENGN.2070-021	Dynamics	M/W/Th	10:30 am-12:50 pm	3	P: ENGN.2050 and MATH.1320	D. Sullivan
<b>CHEMICAL ENGINEERING</b>							
2991	CHEN.2020-021	Energy Balance and Introduction to Thermodynamics	M/W/Th	1:00-3:20 pm	3	P: CHEN.2010	E. Maase
2992	CHEN.3030-021	Fluid Mechanics	M/W	6:00-8:50 pm	3	P: CHEN.2010; C: MATH.2360 or MATH.2340	E. Maase
2996	CHEN.4030-021	Chemical Reaction Engineering	M/W/Th	10:30 am-12:50 pm	3	P: CHEN.3110 with a C- or better; C: CHEM.3440	M. Howley
<b>CRIMINAL JUSTICE</b>							
2557	CRIM.3980-021	Criminal Justice Data Analysis	M/W	9:00 am-12:00 pm	3	P: CRIM.3900 or PSYC.2690	Dept. Faculty
<b>ECONOMICS</b>							
2545	ECON.2010-021	Economics I (Microeconomics)	M/W	6:00-8:50 pm	3		H. Khosla
2658	ECON.2020-021	Economics II (Macroeconomics)	T/Th	6:00-8:50 pm	3		P. Machado
<b>ELECTRICAL AND COMPUTER ENGINEERING</b>							
3167	EECE.2010-021	Circuit Theory I	M/W/Th	1:00-3:20 pm	3	P: PUBH.1320; C: EECE.2070	A. Paradis
3171	EECE.2020-021	Circuit Theory II	M/W/Th	8:00-10:20 am	3	P: EECE.2010 C or better; C: EECE.2080	J. Tang
3173	EECE.2070-021	Basic Electrical Engineering Laboratory I	T/Th	8:00-10:50 am	2(3)	C: EECE.2010	M. Darish
3174	EECE.2080-021	Basic Electrical Engineering Laboratory II	M/W	12:00-2:50 pm	2(3)	P: EECE.2070; C: EECE.2020	J. Tang
3177	EECE.2650-021	Logic Design	M/W/Th	10:30 am-12:50 pm	3	P: ENGN.1080 or COMP.1010 and C- or better in MATH.1320, EE, CP/CS, ME majors only	M. Margala
3179	EECE.3120-021	Electronics II Laboratory	T/Th	12:00-2:50 pm	2(3)	P: EECE.2010 and EECE.2360	M. Darish
3182	EECE.3620-021	Signals and Systems I	T/Th	2:00-4:50 pm	3	P: EECE.2020 and MATH.2360	M. Mah'd
3327	EECE.3660-021	Electronics II	M/W/Th	8:00-10:20 am	3	P: EECE.3650; C: EECE.3120	D. Bowden
3189	EECE.4240-021	Computational Methods for Power Systems Analysis	T/Th	6:00-8:50 pm	3	P: EECE.2020	M. Mah'd
3207	EECE.4500-021	Advanced Digital System Design	M/W/Th	1:00-3:20 pm	3	P: EECE.2650, EECE.3660, EECE.3120, and EECE.3170; or permission of instructor	M. Margala
3212	EECE.4680-021	Electro-Optics and Fiber Optics	T/Th	6:00-8:50 pm	3	P: EECE.3600	X. Lu
3214	EECE.4820-021	Computer Architecture and Design	M/W/Th	5:00-7:50 pm	3	P: EECE.2650, EECE.3170	M. Margala
<b>ENGLISH</b>							
2477	ENGL.1010-021	College Writing I	M/W	7:00-9:50 pm	3		P. Lochelt
2494	ENGL.1020-021	College Writing II	T/Th	7:00-9:50 pm	3	P: ENGL.1010	M. Miller
<b>FINANCE</b>							
2678	FINA.3010-021	Financial Management	M/W	6:30-9:20 pm	3	P: ACCT.2010, ECON.2010, ECON.2020; COM filter courses, BSBA Major or Business Minor/BSIT/ASIT with 54+ credits	L. Sun
2772	FINA.3310-021	Principles of Corporate Finance	M/W	6:30-9:20 pm	3	P: FINA.3010, FINA.3030, BSBA Majors	A. Rehman
<b>HEALTH</b>							
2687	HSCI.1020-021	Human Anatomy and Physiology II	T/Th	6:00-8:50 pm	3	P: HSCI.1010, HSCI.1030 or equiv.; C: HSCI.1040	P. Fierimonte
2690	HSCI.1040-021	Human Anatomy and Physiology Laboratory II	T/W/Th	2:00-5:00 pm	1(3)	P: HSCI.1010, HSCI.1030; C: HSCI.1020	J. Daza Saya
2691	HSCI.1040-022	Human Anatomy and Physiology Laboratory II	T/W/Th	11:00 am-2:00 pm	1(3)	P: HSCI.1010, HSCI.1030; C: HSCI.1020	K. Hammerstone
2697	HSCI.2110-021	Basic Clinical Microbiology and Pathology	M-Th	6:00-8:00 pm	3	P: HSCI.1020, HSCI.1040; C: HSCI. 2130	S. Zimmerman
2700	HSCI.2130-021	Basic Clinical Microbiology and Pathology Laboratory	M-Th	8:00-10:00 pm	1(3)	C: HSCI.2110	S. Zimmerman
2706	HSCI.2520-021	Physiological Chemistry II (Course ends on 8/12/16)	M/W	10:00 am-12:00 pm	3	C: HSCI.2540	J. Horta
2718	HSCI.2540-021	Physiological Chemistry II Laboratory		1:00-3:00 pm T/Th 10:00 am-1:00 pm	1(3)	C: HSCI.2520	B. Geiger
<b>HISTORY</b>							
3514	HIST.1110-021	US History to 1877	M/W	6:00-8:50 pm	3		R. Lemire
3336	HIST.3650-021	United States History since 1960	T/Th	6:30-9:20 pm	3		S. Russell
<b>LEGAL STUDIES AND PARALEGAL STUDIES</b>							
2874	LGST.2620-021	Introduction to Business Law	M/W	6:00-9:20 pm	3		D. Summer
<b>MARKETING</b>							
2643	MKTG.2010-021	Marketing Principles	M/W	6:00-8:50 pm	3	P: PSYC.1010, SOCI.1010, ECON.2010	D. Casey
2646	MKTG.2100-021	Professional Communications	T/Th	6:00-8:50 pm	3	P: BA, BBA majors	K. Hvizda
<b>MATHEMATICS</b>							
2743	MATH.1200-021	Precalculus Mathematics I	M/W	6:30-9:20 pm	3	P: INFO.1110 or equivalent or satisfactory score on the Math Placement Exam given the first week of class; MA.	C. Weston



SUMMER II UNDERGRADUATE COURSES

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
2747	MATH.1220-021	Management Calculus	M/W/Th 1:00-3:20 pm	3	P: INFO.1190 or MATH.1200 or MATH.1210 or equivalent; not for science or engineering majors; MA	E. Yankowskas
2752	MATH.1260-021	Calculus B	M/W 6:00-8:50 pm	3	P: MATH.1250; MA	T. Schille
2761	MATH.1310-021	Calculus I	M-F 8:00-9:50 am	4	MA	J. Lahoud
2763	MATH.1310-022	Calculus I	M-F 10:30 am-12:20 pm	4	MA	J. Lahoud
2779	MATH.1320-021	Calculus II	M-F 8:00-9:50 am	4	P: MATH.1310; MA	M. Stick
2781	MATH.1320-022	Calculus II	M-F 10:30 am-12:20 pm	4	P: MATH.1310; MA	J. Weston
2784	MATH.1320-023	Calculus II	M-F 10:30 am-12:20 pm	4	P: MATH.1310; MA	R. Brent
2785	MATH.2210-021	Linear Algebra I	M/W/Th 8:00-10:20 am	3	P: MATH.1320	H. Troughton
2792	MATH.2310-021	Calculus III	M-F 10:30 am-12:20 pm	4	P: MATH.1320; MA	R. Mirie
2798	MATH.2340-021	Differential Equations	M/W 6:00-8:50 pm	3	P: MATH.2250 or MATH.1320	R. Mirie
2811	MATH.2830-021	Introduction to Statistics	M/W/Th 8:00-10:20 am	3	P: MATH.1200 or equivalent; MA	A. Olsen
2813	MATH.2830-022	Introduction to Statistics	M/W 7:00-9:50 pm	3	P: MATH.1200 or equivalent; MA	A. Olsen
2822	MATH.3210-021	Discrete Structures I	M/W 6:00-8:50 pm	3	P: INFO.1120 or MATH.1200	A. Penta
2833	MATH.4350-021	History of Mathematics	M/W 4:00-7:00 pm	3	P: MATH.1320	M. Beyranevand

\*\*Credit is given for only one of the two following courses: MATH.1200 or MATH.1210. University of Massachusetts Lowell day students must have approval from their Department Chairperson before taking courses with INFO prefix. Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. See the graduate mathematics course listings on the Registrar's web page.

MECHANICAL ENGINEERING						
2681	ENGN.2050-021	Statics	M/W/Th 1:00-3:20 pm	3	P: PHYS.1410; C: MATH.1320	F. Jamil
3095	ENGN.2060-021	Strength of Materials	M/W/Th 8:00-10:20 am	3	P: ENGN.2050 and MATH.1320	J. McKelliget
2688	ENGN.2070-021	Dynamics	M/W/Th 10:30 am-12:50 pm	3	P: ENGN.2050 and MATH.1320	D. Sullivan
2696	MECH.2420-021	Thermodynamics	T/Th 7:00-9:50 pm	3	P: MATH.1320 or MATH.1420 and PHYS.2450 and CHEM.1210 or CHEM.1350	J. Colluccini
2698	MECH.3020-021	Instrumentation and Measurement Laboratory	M-Th 10:30 am-12:20 pm	3(4)	P: MECH.1210, MECH.2420, MECH.3610, and EECE.2110 or PHYS.1410/1440	R. Gowda
2699	MECH.3110-021	Applied Strength of Materials	M/W/Th 1:00-3:20 pm	3	P: MECH.2120; C: MECH.2960	K. White
2710	MECH.3820-021	Heat Transfer	M/W/Th 3:30-5:50 pm	3	P: MECH.3810, MECH.2420	D. Sullivan
3310	MECH.4420-021	Thermo-fluid Systems Design	M/W/Th 8:00-10:20 am	3	P: MECH.4410	I. Kakhki
OPERATIONS AND INFORMATION SYSTEMS						
2768	MIST.2010-021	Business Information Systems	M/W/Th 3:30-5:50 pm	3	P: ECON.2110 or MATH.1830 or MATH.2830	H. Kartal
3335	MIST.4080-021	Enterprise Systems	M/W 6:00-8:50 pm	3	P: MIST.2010 or instructor permission	M. Albashrawi
2797	POMS.2010-021	Managerial Decision Making	T/Th 6:00-8:50 pm	3	P: ECON.2110 or MATH.1830 or MATH.2830	J. Levy
2803	POMS.3010-021	Operations Management	T/Th 6:00-8:50 pm	3	P: POMS.2010	E. Early
2802	POMS.3010-022	Operations Management	M/W 1:00-4:00 pm	3	P: POMS.2010	A. Oztekin
PARALEGAL STUDIES			(See Legal Studies)			
PHILOSOPHY						
3233	PHIL.2020-021	Introduction to Logic and Critical Reasoning	M/W/Th 10:30 am-12:50 pm	3		C. Hodapp
3255	PHIL.2030-021	Introduction to Ethics	M/W/Th 10:30 am-12:50 pm	3		D. White
PHYSICS						
3235	PHYS.1040-021	General Physics II	M-F 8:00-9:50 am	3(4)	P: PHYS.1030; C: PHYS.1040	C. Narayan
3239	PHYS.1410-021	Physics I	M-F 8:00-9:50 am	3(4)	C: MATH.1310; PHYS.1410	N. Sullivan
3242	PHYS.1440-021	Physics II	M-F 8:00-9:50 am	3(4)	P: PHYS.1410; C: MATH.1320, PHYS.1440	A. Danylov
3245	PHYS.1040L-021	General Physics II Laboratory	M/Th 10:30 am-1:20 pm	1(2)	P: PHYS.1030; C: PHYS.1040 or PHYS.2020	Dept. Faculty
3250	PHYS.1410L-021	Physics I Laboratory	W/F 10:30 am-1:20 pm	1(2)	C: PHYS.1410	Dept. Faculty
3254	PHYS.1440L-021	Physics II Laboratory	W/F 10:30 am-1:20 pm	1(2)	P: PHYS.1410; C: PHYS.1440	Dept. Faculty
PLASTICS						
2807	PTEC.4530-021	Selected Topics III	M/W 7:00-9:50 pm	3		S. Driscoll
2815	PTEC.4540-021	Selected Topics IV	M/W 7:00-9:50 pm	3		S. Driscoll
POLITICAL SCIENCE						
2844	POLI.1010-021	Introduction to American Politics	T/Th 7:00-9:50 pm	3		G. Polites
2851	POLI.1750-021	Introduction to Environmental Politics	T/Th 7:00-9:50 pm	3		V. Gray
PSYCHOLOGY						
2930	PSYC.1010-021	Introduction to Psychological Science (Formerly General Psychology)	M/W/Th 8:00-10:20 am	3		A. Weida
2944	PSYC.3050-021	Psychology and Law	M/W/Th 10:30 am-12:50 pm	3	P: PSYC.1010	H. Johnson
2946	PSYC.3280-021	Dynamics of Interpersonal Relations	M/W 6:00-8:50 pm	3	P: PSYC.1010, Junior or Senior level	P. Hantzis
2963	PSYC.4750-021	Seminar in Clinical Psychology: Treatment Approaches	M/W/Th 3:30-5:50 pm	3	P: PSYC.1010 and PSYC.2690	P. Hantzis
SOCIOLOGY						
2890	SOCI.1010-021	Introduction to Sociology	M/W 7:00-9:50 pm	3		L. Chorbajian
2900	SOCI.2340-021	Race and Ethnicity	M/W/Th 8:00-10:20 am	3	P: SOCI.1010	J. Ellis
2901	SOCI.2550-021	Sociology of Deviance	T/Th 7:00-9:50 pm	3	P: SOCI.1010	D. Egan
2906	SOCI.3820-021	Social Movements	M/W/Th 10:15 am-12:15 pm	3	P: SOCI.1010	R. Hudak

Summer Session I | Graduate Courses |

Except as noted: Classes begin on May 16.

M/W Classes begin on Monday, May 16 and include 3 FRIDAYS: May 20, June 3 and June 17 at the regularly scheduled hours.

T/Th Classes begin on Tuesday, May 17 and include 2 FRIDAYS: May 27 and June 10 at the regularly scheduled hours.

Students interested in applying into Graduate degree or certificate programs should contact the Graduate Admissions Office at 800-656-GRAD or [www.uml.edu/grad](http://www.uml.edu/grad). In some cases, a student may take only 6 credits prior to matriculating into a formal graduate degree program. Students with Bachelor's degrees from accredited institutions are eligible to enroll as non-degree students for a total of 12 credits prior to matriculating into formal Graduate degree programs. Generally, students must formally apply to graduate certificate programs before enrolling in graduate courses intended for specific certificate programs.

NOTE: The below MBA courses are also open to non-UML grad students who meet course prerequisites. If not currently registered in a program, please contact the MBA Staff at [MBA@uml.edu](mailto:MBA@uml.edu) or call 978-934-2848 for permission to take courses.

BIOLOGICAL SCIENCES						
3280	BIOL.5210L-011	Biochemistry Techniques	M/W 11:00-11:50 am M/W 1:00-4:50 pm	2(5)	P: or C: BIOL.4190 or BIOL.5190	E. Zagriadskaia

Please check course numbers and prerequisites to ensure enrollment in the correct class.

Full Term Online Classes (-031): May 16–August 6, 2016  
Accelerated Online Classes (-061) May 16–July 23, 2016  
Summer I On Campus (-011): May 16–June 27, 2016



# SUMMER I GRADUATE COURSES

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
BIOMEDICAL ENGINEERING						
3433	BMBT.5000-001	Introduction to Biomedical Engineering and Biotechnology	Wed 6:00-9:20 pm	3		M. O'Connor
3536	BMBT.5160-031	Basic Principles of Nuclear Magnetic Resonance Imaging	>Online Course	3		D. Bennet
BUSINESS ADMINISTRATION						
2517	ACCT.5010-081	Financial Accounting	>Online Course	2	P: MBA/Business Certificate/Ph.D. Engineering students, or permission of MBA Coordinator	J. Casello Bouges
2523	ACCT.6010-011	Accounting Information for Management Decisions	T/Th 6:00-8:50 pm	3	P: Matriculated MBA students, MBA Foundation Core, or permission of MBA Coordinator	G. Joseph
2526	ACCT.6010-061	Accounting Information for Management Decisions	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission of MBA Coordinator	L. Andrusaitis
2528	ACCT.6020-061	Advanced Management and Sustainability Accounting	>Online Course	3	P: ACCT. 6010, or permission of MBA Coordinator	G. Joseph
2530	ACCT.6020-062	Advanced Management and Sustainability Accounting	>Online Course	3	P: ACCT. 6010, or permission of MBA Coordinator	G. Joseph
2612	ENTR.6400-061	New Venture Creation	>Online Course	3	P: ACCT. 6010 Matriculated MBA students, MBA Foundation Core, MSITE program, or PSM sub-plan, or permission of Graduate Program Coordinators.	Y. Yang
2632	ENTR.6500-061	Innovation and Emerging Technology	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, MSITE program, or PSM sub-plan, or permission of Graduate Program Coordinators.	J. O'Donnell
2633	ENTR.6550-061	Corporate Entrepreneurship	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, MSITE program, or PSM sub-plan, or permission of Graduate Program Coordinators.	A. Mehta
2640	ENTR.6810-001	Capstone II - New Venture Implementation	Mon 6:00-8:50 pm	3	P: MSITE program, or PSM sub-plan, or permission of Graduate Program Coordinators. Meets every other week	A. Mehta
2780	FINA.5010-081	Business Financial Analysis	>Online Course	2	P: MBA, Business Cert, or Doctor of Engineering majors; ACCT. 5010; or permission of MBA Coordinator	Y. Puri
2793	FINA.6010-061	Corporate Finance	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission of MBA Coordinator	R. Jain
2794	FINA.6010-062	Corporate Finance	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission of MBA Coordinator	S. Latif
2804	FINA.6020-011	Advanced Corporate Finance	M/W 6:00-8:50 pm	3	P: Matriculated MBA students, MBA Foundation Core	C. Kim
2824	FINA.6110-061	Financial Statement Analysis	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission of MBA Coordinator	S. Latif
2817	FINA.6910-061	International Financial Management	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission of MBA Coordinator	D. Prasad
2877	MGMT.5010-011	Organizational Behavior	T/Th 6:00-8:15 pm	2	P: MBA, Business Cert, or Doctor of Engineering majors; or permission of MBA Coordinator	O. Tines
2878	MGMT.5010-081	Organizational Behavior	>Online Course	2	P: MBA, Business Cert, or Doctor of Engineering majors; or permission of MBA Coordinator	D. Breyer
2880	MGMT.5110-081	Global Enterprise and Competition	>Online Course	2	P: MBA, Business Certificate, Doctor of Engineering programs, or permission of MBA Coordinator	A. Mehta
	MGMT.5750-061	NEW! Business Fundamental for Scientists	>Online Course	3	P: This course meets PSM program requirements	D. Vacarra
2887	MGMT.6010-011	Managing Organizational Change	T/Th 6:00-8:50 pm	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	D. Vacarra
2888	MGMT.6010-061	Managing Organizational Change	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	D. Vacarra
2881	MGMT.6250-011	Negotiations	M/W 6:00-8:50 pm	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	T. Kainen
3025	MGMT.6350-061	Project Management	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	E. Chen
2920	MGMT.6520-081	Human Resources Management	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission of Graduate Coordinator	B. Hargreaves-Heald
2883	MGMT.6550-011	Mid-Management Skills for the New Business Environment	T/Th 6:00-8:50 pm	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	T. Kainen
2885	MGMT.6880-011	Current Topics in Management: Leadership Processes	M/W 6:00-8:50 pm	3	P: Open to Professional MBA Students only	L. Turner
2889	MGMT.6910-061	Strategy Formation and Implementation	>Online Course	3	P: ACCT.6010, FINA.6010, MKTG.6010, POMS.6010, MGMT.6010; MBA matriculated students or permission from MBA Coordinator	A. Mehta
2773	MIST.6010-061	Management Information Systems	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	E. Chen
2774	MIST.6010-062	Management Information Systems	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	L. Motiwalla
2775	MIST.6010-063	Management Information Systems	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	Dept. Faculty
2782	MIST.6070-061	Electronic Business	>Online Course	3	P: Matriculated MBA students, MBA Foundation Core, or permission from MBA Coordinator	J. Qin
2653	MKTG.5010-081	Marketing Fundamentals	>Online Course	2	P: MBA, Business Cert, or Doctor of Engineering majors; ACCT. 5010; or permission of MBA Coordinator	J. Crooker
2654	MKTG.5010-085	Marketing Fundamentals	Mon 6:00-8:50 pm	2	P: MBA, Business Cert, or Doctor of Engineering majors; ACCT. 5010; or permission of MBA Coordinator	T. Morgan
	MKTG. 5450-031	NEW! Professional and Scientific Communication	>Online Course	3	P: This course meets PSM program requirements	J. Duff
2655	MKTG.6010-061	Customers and Markets	>Online Course	3	P: Matriculated MBA Students, MBA Foundation Core, or permission of MBA Coordinator	E. Yoon
2806	POMS.5010-081	Operations Fundamentals	>Online Course	2	P: MBA , Business Certificate, Doctor of Engineering programs, or permission of MBA Coordinator	M. Khan
2921	POMS.6010-061	Operations Management	>Online Course	3	P: Matriculated MBA Students, MBA Foundation Core, or permission of MBA Coordinator	A. Oztekin
2922	POMS.6010-062	Operations Management	>Online Course	3	P: Matriculated MBA Students, MBA Foundation Core, or permission of MBA Coordinator	K. Poirier
CHEMICAL ENGINEERING						
2997	CHEN.5240-011	NEW! Self Assembly and Nanotechnology	M/W/Th 10:30 am-12:50 pm	3		Z. Gu
2998	CHEN.5370-011	Nanomaterials Characterization I	T/Th 6:00-8:50 pm	3		F. Gao
CIVIL ENGINEERING						
2730	CIVE.5610-011	Physical Chemical Treatment Processes	M/W 6:00-8:50 pm	3		X. Zhang
COMPUTER SCIENCE						
3369	MSIT.5110-031	Network and System Administration	>Online Course	3		H. Lambright
3370	MSIT.5190-031	Virtual Systems	>Online Course	3		J. Lu
3373	MSIT.5310-031	Project Management	>Online Course	3		D. Zarrella
3374	MSIT.5320-031	Managing Large Data Sets	>Online Course	3		C. Chen
3372	MSIT.5450-031	Designing and Building a Cybersecurity Program	>Online Course	3		L. Wilson
3371	MSIT.5620-031	Digital Forensics	>Online Course	3		X. Fu



SUMMER I GRADUATE COURSES

SIS No.	Course No.	Title	Days Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
CRIMINAL JUSTICE						
3339	CRIM.5010-031	Criminological Theory: Foundations	>Online Course	3		L. Siegel
2584	CRIM.5200-031	Administration of Criminal Justice	>Online Course	3		L. Siegel
2569	CRIM.5400-031	Criminal Profiling	>Online Course	3		J. Brown
2585	CRIM.5410-061	Forensic Psychology	>Online Course	3		I. Packer
2573	CRIM.5660-031	Transportation Systems Safety and Security	>Online Course	3		G. Gordon
2592	CRIM.5740-031	Overview of Homeland Security	>Online Course	3		T. Croft
2588	CRIM.6400-061	Criminal Mind and Behavior	>Online Course	3		A. Lincoln
2582	CRIM.5710-031	<b>NEW!</b> Domestic Terrorism and Violent Extremism	>Online Course	3		J. Day
2595	CRIM.5720-031	Comparative Terrorism and Counterterrorism	>Online Course	3		J. Forest
2601	CRIM.5780-031	Intelligence Analysis Policy	>Online Course	3		C. Hickey
3414	CRIM.5750-031	Contemporary Security Studies	>Online Course	3		C. Kirchofer
3345	CRIM.5900-031	Descriptive and Inferential Statistics	>Online Course	3		D. Faggiani
3344	CRIM.5910-031	Research Design	>Online Course	3		K. Jordan
3342	CRIM.6130-031	Law & Public Policy	>Online Course	3		C. Harris
3340	CRIM.6300-061	Victimology	>Online Course	3		E. Buzawa
3347	CRIM.6310-061	Intimate Partner Violence	>Online Course	3		E. Buzawa
2609	CRIM.6420-061	Sex Crimes and Offenders	>Online Course	3		K. Socia
3343	CRIM.6510-061	Criminal Homicide	>Online Course	3		P. Tracy
2610	CRIM.6550-031	Substance Abuse and Crime	>Online Course	3		W. Palacios
2594	CRIM.6680-031	Scientific and Technological Dimensions of National Security	>Online Course	3		D. Boyd
2613	CRIM.6990-031	Security Studies Capstone Research Paper	>Online Course	3		J. Forest
For permission numbers and questions regarding the Criminal Justice Program, please email Karen_Mullins@uml.edu.						

EDUCATION						
1016	BIOL.5080-061	Cell Biology for Teachers	>Online Course	3		M. Mawn
1003	EDUC.5220-061	Young Adult Literature	>Online Course	3	**RL	L. Dagostino
1004	EDUC.6100-061	Teaching Reading in the Content Area	>Online Course	3	**RL	J. Brown
1005	EDUC.6220-061	Managing Resources and Finances	>Online Course	3	**EA	D. Troughton
1007	EDUC.6300-061	Educating Diverse Populations	>Online Course	3	** CI, EA, RL	M. Kim
1008	EDUC.6370-061	History and Theory of Curriculum	>Online Course	3	**CI, CI (sci)	J. Boccia
1009	EDUC.6380-061	Curriculum Design K-12	>Online Course	3	**CI, CI (sci)	J. Walsh
1010	EDUC.6410-061	Issues in Staff Development	>Online Course	3	**HE	J. Lehoullier
1023	EDUC.6423-061	Program Evaluation	>Online Course	3		E. O'Brien
1011	EDUC.6430-061	The Skillful Teacher	>Online Course	3	**CI	R. Gower
1012	EDUC.6431-061	Principalship PK-12	>Online Course	3	**EA	J. Gilmore
1019	EDUC.6440-061	Foundations for Practitioner Scholars	>Online Course	3	Ed. D Matriculated Only	J. Nehring
1013	EDUC.6530-061	Capstone Alternative	>Online Course	3	Permission of Instructor	M. Scribner-MacLean
1015	EDUC.6760-061	Exploring the Nature of Science	>Online Course	3	**CI(sci)	S. Lewis
1020	EDUC.6911-061	<b>NEW!</b> Applied Research Design	>Online Course	3	Ed. D Matriculated Only	X. Newton
1017	ENGN.5010-061	<b>NEW!</b> Engineering for Teachers	>Online Course	3		E. Hajduk

\*\*The Graduate School of Education offers Online Courses leading to four Masters of Education degrees: (1) Educational Administration (EA); (2) Reading and Language (RL); (3) Curriculum and Instruction (CI) or Curriculum and Instruction: Science Concentration (CI)(sci) (4) Higher Ed (HE). The letters in the prerequisites column refer to which programs each course is aligned. Ed. S. degrees are available in each area except Higher Education.

ELECTRICAL AND COMPUTER ENGINEERING						
3479	EECE.5100-011	Digital Signal Processing	M/W 6:00-8:50 pm	3		M. Mah'd
3292	EECE.5280-011	Alternate Energy Sources	M/W 6:00-8:50 pm	3	P: Permission of instructor	Z. Salameh
3293	EECE.5290-011	Electric Vehicle Technology	T/Th 6:00-8:50 pm	3	P: Permission of instructor	Z. Salameh
3222	EECE.5760-061	Principles of Solid State Devices	>Online Course	3	P: EECE.3650	C. Armiento
3224	EECE.5830-011	Network Design: Principles, Protocols & Applications	M/W 6:00-8:50 pm	3		A. Paradis
3217	EECE.5900-011	Fiber Optic Communication	T/Th 6:00-8:50 pm	3		X. Lu
3228	EECE.7110-011	<b>NEW!</b> Selected Topics in Electrical Engineering: Introduction to RFID Systems	M/W 6:00-8:50 pm	3		C. Kochakian

HEALTH						
3589	PUBH.5020-051	Organizational Behavior in Healthcare	Tues 5:30-8:30 pm	3		R. Holmes
		(Blended Course: Held at UMass Lowell South Campus and and Online)				
3590	PUBH.5140-061	Healthcare Management	>Online Course	3		J. Mahan
2720	MLSC.5800-031	Clinical Application of Molecular Genetics	>Online Course	3		T. Namm
2729	PUBH.5310-061	Health Informatics	>Online Course	3		G. Marcus
3074	PUBH.5590-011	Conflict Resolution	T/Th 6:00-8:50 pm	3		D. Turcotte
3591	PUBH.6070-001	Healthcare Information Systems	Tues 5:30-8:30 pm	3		P. Grotton
		(Blended Course: Held at UMass Lowell South Campus and and Online)				
2732	PUBH.6070-061	Healthcare Information Systems	>Online Course	3		D. Rose
2733	PUBH.6330-061	Healthcare Database Design	>Online Course	3		G. Robinson
2735	PUBH.6350-031	Healthcare Project Management	>Online Course	3		D. Flodin
3592	PUBH.6380-001	Strategic Planning in Healthcare and HIT	Mon 5:30-8:30 pm	3		P. Grotton
		(Blended Course: Held at UMass Lowell South Campus and and Online)				
2737	PUBH.6390-061	Electronic Health Record Systems	>Online Course	3		M. Meyer

INFORMATION TECHNOLOGY				(See also Computer Science)		
3369	MSIT.5110-031	Network and System Administration	>Online Course	3		H. Lambright
3370	MSIT.5190-031	Virtual Systems	>Online Course	3		J. Lu
3373	MSIT.5310-031	Project Management	>Online Course	3		D. Zarrella
3374	MSIT.5320-031	Managing Large Data Sets	>Online Course	3		C. Chen
3372	MSIT.5450-031	Designing and Building a Cybersecurity Program	>Online Course	3		L. Wilson
3371	MSIT.5620-031	Digital Forensics	>Online Course	3		X. Fu
GRADUATE ONLINE CERTIFICATE IN NETWORK SECURITY (See website for details.)						
GRADUATE ONLINE CERTIFICATE IN SYSTEMS MODELS AND MANAGEMENT (See website for details.)						
MSIT prefix courses do not need permission of the Graduate Computer Science Coordinator						

MATHEMATICS						
2839	MATH.5000-061	Discrete Structures	>Online Course	3		A. Doerr
2841	MATH.5090-001	Probability and Mathematical Statistics	Mon 6:00-8:50 pm	3		J. Soo Lee
2843	MATH.5130-011	Number Theory	M/W 6:00-8:50 pm	3		K. Levasseur
2845	MATH.5210-011	Abstract Algebra	T/Th 6:00-8:50 pm	3		A. Doerr
2848	MATH.5500-001	Mathematical Modeling	Mon 3:00-5:50 pm	3		J. Graham-Eagle

MECHANICAL ENGINEERING						
2716	MECH.5750-061	Industrial Design of Experiment*	>Online Course	3		S. Shina
2717	MECH.5760-061	Engineering Project Management	>Online Course	3		S. Shina
*This course can be used to replace MECH.4730 Design Theory and Constraints. It can also count as a Mechanical Engineering Technical elective.						
**This course can count as a Mechanical Engineering Technical elective and as an elective for Engineering students with a Business Administration minor.						



# SUMMER II GRADUATE COURSES

SIS No.	Course No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
NURSING			(See Health)				
PEACE AND CONFLICT STUDIES							
2727	PCST.5120-011	Community Conflict Resolution	T/Th	6:00-8:50 pm	3		D. Turcotte/ M. Zapata-Turcotte
PROFESSIONAL SCIENCE MASTERS PROGRAM							
	MKTG.5450-031	<b>NEW!</b> Professional and Scientific Communication	>Online Course		3	P: This course meets PSM program requirements	J. Duff
	MGMT.5750-061	<b>NEW!</b> Business Fundamentals for Scientists and Engineers	>Online Course		3	P: This course meets PSM program requirements	D. Vacarra
PSYCHOLOGY							
2965	PSYC.5610-031	Introduction to Behavioral Intervention in Autism (Course ends on 8/13/16)	>Online Course		3	Coursework in the psychology of child development, or related experience	R. Serna
2966	PSYC.5610-032	Introduction to Behavioral Intervention in Autism (Course ends on 8/13/16)	>Online Course		3	P: Coursework in the psychology of child development, or related experience	N. Aguila
2968	PSYC.5610-033	Introduction to Behavioral Intervention in Autism (Course ends on 8/13/16)	>Online Course		3	P: Coursework in the psychology of child development, or related experience	A. Perry
2970	PSYC.5610-034	Introduction to Behavioral Intervention in Autism (Course ends on 8/13/16)	>Online Course		3	P: Coursework in the psychology of child development, or related experience	J. Schmidt
2971	PSYC.5620-031	Teaching and Positive Behavioral Support in Autism (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	R. Rosales
2972	PSYC.5620-032	Teaching and Positive Behavioral Support in Autism (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	J. Potter
2973	PSYC.5620-033	Teaching and Positive Behavioral Support in Autism (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	Y. Padilla Dalmau
2975	PSYC.5630-031	<b>NEW!</b> Management Strategies in Applied Behavioral Intervention (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	R. Markovits
2976	PSYC.5650-031	Measurement and Experimental Design in Behavioral Autism (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	P. Girolami
2977	PSYC.5650-032	Measurement and Experimental Design in Behavioral Autism (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	H. Eilers
2978	PSYC.5650-033	Measurement and Experimental Design in Behavioral Autism (Course ends on 8/13/16)	>Online Course		3	P: or C: PSYC.5610	N. Hausman
2979	PSYC.5660-031	Functional Analysis and Treatment of Challenging Behavior (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5620	E. Shumate
2980	PSYC.5660-032	Functional Analysis and Treatment of Challenging Behavior (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5620	C. Borrero
2981	PSYC.5660-033	Functional Analysis and Treatment of Challenging Behavior (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5620	S. Contrucci-Kuhn
2982	PSYC.5680-031	Behavioral Intervention Program Models in Autism (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5620	D. Shade-Monuteaux
2983	PSYC.5680-032	Behavioral Intervention Program Models in Autism (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5620	K. Wagner
2984	PSYC.5680-033	Behavioral Intervention Program Models in Autism (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5620	D. Bicar
2985	PSYC.5720-031	Legal and Ethical Issues in Professional Practice (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5650 or PSYC.5660	R. Markovits
2986	PSYC.5720-032	Legal and Ethical Issues in Professional Practice (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5650 or PSYC.5660	D. Kuhn
2987	PSYC.5720-033	Legal and Ethical Issues in Professional Practice (Course ends on 8/13/16)	>Online Course		3	P: PSYC.5650 or PSYC.5660	D. Bailey
2988	PSYC.6710-001	Supervised Practicum in Behavioral Intervention in Autism: I	Tues	6:00-9:30 pm	3	P: PSYC.6720	R. Markovits
2989	PSYC.6730-001	Supervised Practicum in Behavioral Intervention in Autism: III	Thurs	6:00-9:30 pm	3	P: PSYC.6720	D. Shade-Monuteaux
WORK ENVIRONMENT							
3074	PUBH.5590-011	Conflict Resolution	T/Th	6:00-8:50 pm	3		D. Turcotte/ M. Zapata-Turcotte

## Summer Session II | Graduate Courses | July 6-August 16

Except as noted: Classes begin on July 6.

M/W Classes begin on Wednesday, July 6 and include 3 FRIDAYS: July 8, July 22 and August 5 at the regularly scheduled hours.

T/Th Classes begin on Thursday, July 7 and include 3 FRIDAYS: July 15 and July 29, and August 12 at the regularly scheduled hours.

Please check course numbers and prerequisites to ensure enrollment in the correct class.

Students interested in applying into Graduate degree or certificate programs should contact the Graduate Admissions Office at 800-656-GRAD or [www.uml.edu/grad](http://www.uml.edu/grad). In some cases, a student may take only 6 credits prior to matriculating into a formal graduate degree program. Students with Bachelor's degrees from accredited institutions are eligible to enroll as non-degree students for a total of 12 credits prior to matriculating into formal Graduate degree programs. Generally, students must formally apply to graduate certificate programs before enrolling in graduate courses intended for specific certificate programs.

NOTE: The following Business Administration courses are also open to non-UML grad students who meet course prerequisites. If not currently registered in a program, please contact the MBA staff at 978-934-2848 for permission to take courses.

BUSINESS ADMINISTRATION							
2778	FINA.5010-021	Business Financial Analysis	M/W	1:00-3:15 pm	2		B. Bonghi
2808	FINA.6100-021	Global Financial Markets and Monetary Policy	T/Th	6:00-8:50 pm	3		M. Carter
2879	MGMT.5110-021	Global Enterprise and Competition	M/W	6:00-8:15 pm	2	P: MBA, Business Certificate, Doctor of Engineering programs, or permission of MBA Coordinator	M. Salach
2886	MGMT.6910-021	Strategy Formation and Implementation	T/Th	6:00-8:50 pm	3	P: ACCT.6010, FINA.6010, POMS.6010, MGMT.6010; Matriculated MBA students	M. Salach
2810	POMS.6010-021	Operations Management	M/W	6:00-8:50 pm	3		K. Poirier
ELECTRICAL AND COMPUTER ENGINEERING							
3480	EECE.5130-021	Control Systems	M/W	6:00-8:50 pm	3		M. Mah'd
3291	EECE.5240-021	Computational Methods for Power Systems Analysis	T/Th	6:00-8:50 pm	3		M. Mah'd
3226	EECE.5460-021	<b>NEW!</b> Communication Networks	M/W	6:00-8:50 pm	3		O. Ibe
3294	EECE.5500-021	Advanced Digital System Design	M/W/Th	1:00-3:20 pm	3		M. Margala
3223	EECE.5610-021	Computer Architecture and Design	M/W/Th	5:00-7:50 pm	3		M. Margala
3221	EECE.5680-021	<b>NEW!</b> Electro-Optics and Fiber Optics	T/Th	6:00-8:50 pm	3		X. Lu
3227	EECE.6600-021	<b>NEW!</b> Mobile Communication Networks	T/Th	6:00-8:50 pm	3		O. Ibe
3229	EECE.7290-021	Selected Topics in Electrical Engineering: Renewable Energy Design	M/W	6:00-8:50 pm	3		Z. Salameh
MATHEMATICS							
2846	MATH.5350-021	History of Mathematics	M/W	4:00-7:00 pm	3		M. Beyranevand
PEACE AND CONFLICT STUDIES							
2907	PCST.5550-021	Mediation: Theory and Practice	T/Th	6:00-8:50 pm	3		S. Izen



# Graduate Education

## BUILDS Careers

### Earn an Advanced Degree

at UMass Lowell



**UMass Lowell prepares students to work in the real-world, solve real problems and help real people.**

UMass Lowell offers advanced degrees in engineering, education, health sciences, management, music, sciences and social sciences.

The wide variety of options allows students to develop specialized programs that meet their career and life goals. Top quality academic programs, vigorous hands-on learning and world-class faculty give graduates the combination of knowledge and experience that prepares them to become effective practitioners and industry leaders.

- Top quality programs
- Affordable
- Convenient
- Part-time or full-time study options
- Online and on campus options
- National and Regional Accreditation
- Thesis, project and coursework-only options available in most Master's programs

Many Master's programs offer an internship or field experience and a variety of options that allow you to specialize your degree.

**Scholarship opportunities for new, highly qualified, full-time Master's candidates.**

No separate application is necessary. Candidates will be considered during admissions review.\*

\*Not applicable to online courses/programs offered through the Division of Online and Continuing Education.

Visit [www.uml.edu/grad](http://www.uml.edu/grad) to explore the possibilities.

#### UMass Lowell Graduate Admissions

Cumnock Hall, Suite 110, 31 University Ave, Lowell, MA 01854-5104



### Save the Date!

#### Fall Graduate Open House and Walk-in Registration

**Come and learn which program is right for you!**

**Wednesday, August 17, 2016**  
from 3:00 - 7:00 pm

UMass Lowell Inn and Conference Center,  
50 Warren Street, Lowell, MA

RSVP at [www.uml.edu/Grad/open-house.aspx](http://www.uml.edu/Grad/open-house.aspx)

**Summer Classes begin May 16, 2016**  
**Fall Classes begin September 1, 2016**

## NEW Graduate Programs

### Master of Science in Engineering Management (MSEM)

The Master of Science in Engineering Management (MSEM) program prepares students for prominent leadership roles in Industry, Operations, Engineering Services or Civil Infrastructure Management by providing them with an in-depth background of the modern technical enterprise and different methodologies and principles to develop or enhance new and existing products and systems.

This 31-credit program offers students the opportunity to choose a concentration in 1) Design and Manufacturing; 2) Engineering Services/Infrastructure Management; or 3) Operations and Supply Management. The program may be completed either full-time or part-time, and students can choose either a Professional Capstone Practice or a coursework-only option.

The MSEM is a specialized degree recognized by the new product realization and architectural community that prepares students for a wide range of design, manufacturing and infrastructure management careers. Graduates of this program will have enhanced skills in order to work effectively in a variety of

leadership positions in engineering systems, program management, quality, operations and supply management, as well as consulting services and facilities management. In addition to preparing engineering or business bachelor degree undergrads for careers in engineering management, this program also serves non-engineering or business graduates who wish to pursue technical management careers.

- Summer 2016 MSEM Course Offerings Include:
- MECH.5750 Industrial Design of Experiment
  - MECH. 5760 Engineering Project Management
  - ACCT.5010 Financial Accounting
  - FINA.5010 Business Financial Analysis
  - MKTG.5010 Marketing Fundamentals
  - POMS.5010 Operations Fundamentals
  - MGMT.5010 Organizational Behavior

For more information, contact Dr. Sammy Shina at 978-934-2590 or [Sammy\\_Shina@uml.edu](mailto:Sammy_Shina@uml.edu).

### Master of Science in Business Analytics

The Master of Science in Business Analytics (MSBA) consists of 10 courses (30 credits), including courses in Data Mining, Statistics, Decision Analytics, and Database Management. Students choose a 3-course concentration in either Big Data Analytics, Managerial Decision Making, Marketing Analytics, or Finance Analytics. Along the way, students are exposed to leading-edge analytics software and hardware, including SAS, R, Tableau, SAP ERP, and Bloomberg terminals. Students then complete a capstone project which connects them with industry partners to solve real-world problems using business analytics tools.

Business Analytics is the process of transforming raw data into business intelligence and insight. As companies generate more data at ever faster rates, the need for business analytics professionals is growing. The Master of Science in Business Analytics program will help you:

- Develop the ability to collect, manage, and analyze data from a variety of sources.
- Enhance your understanding of business processes and systems.
- Develop the ability to understand and communicate insights gleaned from descriptive, predictive, and prescriptive analytics.

The program offers maximum flexibility:

- Students may enroll full-time or part-time.
- Courses are offered in the fall, spring, and summer semesters, allowing full-time students to complete the program in as little as one calendar year.
- Courses are available during the day, the evening or online.

Summer 2016 course offerings include:

- MIST.6070 Electronic Commerce
- MIST.6450 Project Management
- MKTG.6010 Customers and Markets

For more information, please contact Dr. Thomas Sloan at 978-934-2857 or [Thomas\\_Sloan@uml.edu](mailto:Thomas_Sloan@uml.edu).



## Master of Education in Education Administration: Higher Education Option

The M.Ed., Education: Higher education Option focuses on policy and practice in Higher Education. Candidates complete 30 credits of coursework, with some courses offered on campus and some online, providing the flexibility for working professionals to complete the degree in a timely and convenient manner.

The program is open to individuals who have had substantial experiences in higher education work while undergraduates, or who are currently working in higher education.

For information about the program contact Dr. Charmaine Hickey at Charmaine\_Hickey@uml.edu or 978-934-4658.

### Online Summer Offerings from the Graduate School of Education include:

- BIOL.5080 Cell Biology for Teachers
- EDUC.5021 Issues, Mandates & Ethics in Special Education
- EDUC.5220 Young Adult Literature
- EDUC.6220 Managing Resources and Finances
- EDUC.6380 Curriculum Design K-12
- EDUC.6410 Issues in Staff Development
- EDUC.6423 Program Evaluation
- EDUC.6760 Exploring the Nature of Science
- ENGN.5010 Engineering for Teachers

See Page 17 for details on these courses!

Explore your opportunities at <http://www.uml.edu/Education>. UMass Lowell's Graduate School of Education offers graduate degrees at three levels - Master's (M.Ed.), Education Specialist (Ed.S.) and Doctoral (Ed.D. and Ph.D.) - and twelve-credit graduate certificates.



## Master of Science in Autism Studies

Autism Spectrum Disorders (ASDs) are behavioral-neurological disorders, typically diagnosed before the age of three, that profoundly affect the young child's ability to communicate, develop language, form social relationships, and respond appropriately to their environments. Recent estimates of prevalence rates in the U.S. are as high as 1 in every 88 children. Unfortunately, there is a critical workforce shortage of professionals capable of meeting the challenges of those afflicted with this disorder. To help meet this shortage, the UML Department of Psychology, in concert with nationally recognized autism specialists from the UMass Medical School's Eunice Kennedy Shriver Center, have developed a new Master of Science in Autism Studies graduate program.

The Master's in Autism Studies is a 42-credit blended program, with both online and on-campus courses.

Graduates of the Master's in Autism Studies will have met all the education and training requirements that will allow them to sit for the national certification exam to become Board Certified Behavior Analysts™.

This is an exciting opportunity for those who wish to advance their knowledge and skills in the area of ASDs with a Master of Science degree.

### Summer Course Offerings in Autism Studies include:

- PSYC.5610 Introduction to Behavioral Intervention in Autism
- PSYC.5620 Teaching and Positive Behavioral Support in Autism
- PSYC.5650 Measurement & Experimental Design in Behavioral Intervention
- PSYC.5660 Functional Analysis & Treatment of Challenging Behavior
- PSYC.5680 Behavioral Intervention Program Models in Autism
- PSYC.5720 Legal & Ethical Issues in Professional Practice
- PSYC.6710 Supervised Practicum in BIA I
- PSYC.6720 Supervised Practicum in BIA II
- PSYC.6730 Supervised Practicum in BIA III

More information on the program can be found at [www.uml.edu/FAHSS/Psychology/Graduate/Autism-Studies.aspx](http://www.uml.edu/FAHSS/Psychology/Graduate/Autism-Studies.aspx) or by contacting the graduate coordinator of the program, Dr. Richard W. Serna, at Richard\_Serna@uml.edu or 978-934-4385.

## Master's Degrees in Security Studies

The Master of Arts and Master of Sciences in Security Studies are the only publically supported master's degree programs in security studies in New England. These 30-credit interdisciplinary programs address critical workforce needs by blending conceptual frameworks and analytical methods to promote learning and research in understanding and finding solutions to the crucial security challenges facing the nation and the world and are available completely online.

The MA emphasizes the policy, social science, behavioral science and legal dimensions of security studies, offering concentrations in international security, industrial and economic security and homeland defense.

The MS degree program emphasizes the intersection of security and applied technologies, engineering and hard sciences and offers concentrations in chemical, biological, radiological, nuclear, and explosives (CBRNE) security, cybersecurity, and critical infrastructure security.

Graduates of these programs may pursue a wide variety of careers in both the public and private sectors including, but not limited to, security analysts, strategy consultants, security program management, law enforcement, environmental protection, and immigration and customs protection and enforcement.

### Summer Course Offerings in Security Studies include:

- CRIM.5660 Transportation Systems Safety and Security
- CRIM.5710 Domestic Terrorism & Violent Extremism
- CRIM.5720 Comparative Terrorism and Counterterrorism
- CRIM.5740 Overview of Homeland Security
- CRIM.5780 Intelligence Analysis Policy and Practice
- CRIM.5900 Descriptive & Inferential Statistics
- CRIM.5910 Research Design
- CRIM.6680 Scientific & Technological Dimensions of National Security
- CRIM.6990 Security Studies Capstone Research Paper

For more information visit [www.uml.edu/Interdisciplinary/Security-Studies/](http://www.uml.edu/Interdisciplinary/Security-Studies/) or contact James Forest at James\_Forest@uml.edu. Also, see the website of the Center for Terrorism and Security Studies for information about faculty and research at [www.uml.edu/Research/CTSS/](http://www.uml.edu/Research/CTSS/).



## Professional Science Master's Programs Scientific Education for the Corporate World

Professional Science Master's (PSM) degree programs are industry-recognized, two-year, non-thesis programs that provide advanced training in science and technology plus business, communication and leadership skills. Paid internships provide opportunities for real-world application in industry and valuable professional connections. Students working full-time while in a PSM program may complete a special project at their place of employment in lieu of an internship.

### Programs may be completed on a full or part-time basis.

For more information about the Professional Science Master's options, visit [www.uml.edu/psm](http://www.uml.edu/psm). To apply, go to [www.uml.edu/grad](http://www.uml.edu/grad). For more information about the specific Master's programs, contact the Graduate Coordinator of the respective academic department. A complete list may be found at [www.uml.edu/Grad/coordinators.aspx](http://www.uml.edu/Grad/coordinators.aspx).

**PSM Plus courses are offered online and are available to PSM students from all four participating UMass campuses. All PSM courses except for the internship sequence are open to students in other degree programs.** Courses designed specifically for PSM programs include:

#### • PSMA.5100 Professional Science Master's Internship - Offered Summer 2016

The internship component is expected to be 350 hour minimum and 3-6 month duration. The student will work within a business, government agency or research institute directly related to their area of study. Through this experience the student engages in real world work situations involving technical problems, teamwork, communication skills and decision-making. A student must have completed a minimum of 18 credit hours before commencing the internship. This course records the internship experience and carries zero credits.

#### • MKTG.5450 Professional and Scientific Communication - Offered Summer 2016

Students gain practical experience in effective communication skills by developing both written and oral communication within the context of their professional concentration. Assignments simulate those encountered in the "real-world" including persuasive presentations, oral and written reports, and communications with a variety of audiences including mainstream media and funding sources. The course employs newer technologies to enable students to explore the opportunities and constraints technology places on effective communication. (3 credits)

### PSM options are available within the following Master's degree programs:

- Biological Sciences (Applied Biotechnology, Biosafety, Environmental Biotechnology, Project Management for Life Sciences)
- Biomedical Engineering and Biotechnology
- Chemistry (Chemistry and Polymer Science, Pharmaceutical Biochemistry)
- Clinical Laboratory Sciences
- Computer Science (Entrepreneurship)
- Environmental Sciences (Atmospheric Sciences, Environmental Geoscience)
- Marine Sciences
- Mathematics (Industrial Mathematics)
- Pharmaceutical Sciences
- Radiological Science and Protection

#### • MGMT.5750 Business Fundamentals for Scientists and Engineers - Offered Summer 2016

This course is designed for science and other non-business professionals seeking to excel as managers. This course will introduce core business principles. Starting with managing ourselves, and others, we will move through the functional business disciplines. There will be weekly, theme-based case studies and related articles that will provide ample opportunity to work individually and in teams. The goal of this course is to build your knowledge of business principles and develop the analytic and practical skills necessary to contribute in decision-making and operations. (3 credits)

Other PSM courses not offered this Summer include:

- PSMA.5350 Project Management for Scientists
- PSMA.5550 Professional Leadership in Science and Engineering
- ENTR.5650 Technological Entrepreneurship

## FEATURED CERTIFICATE PROGRAM

### Graduate Certificate in Public Health Laboratory Sciences

With today's ever-present threats of emerging infectious diseases, pandemics, food and water-borne illnesses, natural disasters, and biological/chemical attacks, demand for appropriately-trained personnel in public health laboratories, environmental testing facilities, and private medical laboratories has been on the rise.

The Public Health Laboratory Sciences four-course (12 credit), graduate-level certificate program provides healthcare practitioners or individuals holding a bachelor's degree in life sciences, nursing or environmental health with a deeper understanding of the medical sciences behind laboratory testing.

Students have the option of taking this certificate program entirely online, or as a mix of online and on campus courses. In addition to two required core courses, students choose two elective courses from a list of approved courses, depending on their particular areas of interest.

Students who take the certificate program also have the option of applying these courses towards UMass Lowell's on-campus Master's Degree in Clinical Lab Sciences.

Program Requirement: Applicants must have a bachelor's degree in life sciences or related area.

#### Required Courses:

- MLSC.5410 Introduction to Public Health and the Public Health Laboratory
- MLSC.6130 Infectious Disease

#### Electives - Choose 2:

- PUBH.5080 Principles and Practices of Biological Safety
- PUBH.5160 Laboratory Environmental Health and Safety
- MLSC.5800 Clinical Applications of Molecular Genetics - Offered Summer 2016

For additional information, please contact the UMass Lowell Department of Clinical Laboratory and Nutritional Sciences at 978-934-4520.



## FEATURED CERTIFICATE PROGRAM

### Graduate Certificate in Biomedical Engineering

Image data are of increasing importance in Biomedical Engineering and Biotechnology. The application of microelectronic circuitry, high performance processors, and improved algorithms based on advanced mathematics has resulted in innovative new methodologies to acquire and process image data, permitting visualization, quantification, and functional analysis of tissues and organs.

The Biomedical Engineering Graduate Certificate is a multidisciplinary program, spanning courses in several departments in the College of Engineering including Departments of Electrical and Computer Engineering, Plastics Engineering, Chemical and Nuclear Engineering, as well as the Biomedical Engineering and Biotechnology program. The certificate provides an excellent opportunity to learn the principles and applications of imaging technology. This is a 12 credit program comprised of two required three-credit courses, and two elective three-credit courses.

#### Required Courses:

- EECE.5110 Medical Diagnostic Imaging
- EECE.5600 Biomedical Instrumentation

#### Elective Courses: (Students choose two of the following)

- EECE.5100 Digital Signal Processing - **Offered Summer 2016**
- BMBT.5000 Introduction to Biomedical Engineering and Biotechnology - **Offered Summer 2016**
- BMBT.5120 Medical Image Processing
- BMBT.5160 Basic Principles of Magnetic Resonance Imaging - **Offered Summer 2016**
- BMBT.5170 Embedded System Design in Medical Systems
- PUBH.5311 Occupation Biomechanics
- PLAS.5530 Medical Device Design I
- PLAS.5750 Biomaterials I

For more information contact Dr. Mufeed Mah'd at 978-934-3317 or Mufeed\_Mahd@uml.edu.

## Financial Assistance for Graduate Students

### Program: Dean's Fellowships

**Criteria:** Newly admitted full-time, in-state, New England Regional and Proximity Master's candidates not receiving an assistantship will be considered. No additional application required.\*

**Amount:** \$2,000 for one year (\$1,000 per semester for the first two semesters). Students must remain in good academic standing with a minimum 3.0 cumulative GPA. This award is not renewable.

### Program: Provost's Fellowships

**Criteria:** Newly admitted full-time, out-of-state and international Master's candidates not receiving an assistantship will be considered. No additional application required.\*

**Amount:** \$4,000 for one year (\$2,000 per semester for the first two semesters). Students must remain in good academic standing with a minimum 3.0 cumulative GPA. This award is not renewable.

### Program: Provost's Fellowship for Teacher Licensure

**Criteria:** Newly admitted full-time teacher licensure candidates regardless of residency will be considered. No additional application required.\*

**Amount:** \$5,000 for one year (award is split between trimesters – Summer, Fall, Spring) Students must remain in good academic standing with a minimum 3.0 cumulative GPA. This award is not renewable.

### Program: Federal Teach Grant

**Criteria:** Must be a U.S. citizen or eligible non-citizen; maintain a cumulative GPA  $\geq 3.25$  each semester; be enrolled in coursework or plan to complete coursework toward a career in teaching in a high need subject area UMass Lowell eligible program; complete a TEACH Grant Counseling and sign a TEACH Grant Agreement each year. For additional information go to <http://www.uml.edu/thesolutioncenter/financial-aid/Receiving-Aid/Types-Aid/graduate/grants.aspx>

**Amount:** Up to \$4,000/year for two years

\*Students completing courses and online programs through the Division of Online and Continuing Education are not eligible.

## Federal Loan Programs:

### William D. Ford Federal Direct Unsubsidized Loan

(Eligibility does not require demonstrated financial need)

### Federal Direct Grad PLUS Loan

(Eligibility does not require demonstrated financial need)

Required for all loan programs: Graduate degree candidates enrolled in 6 credits are eligible to apply. Students must file a Free Application for Federal Student Aid (FAFSA).

For more information go to: [www.uml.edu/financialaid](http://www.uml.edu/financialaid)

## Special Savings Opportunities

### New England Regional Student Program\*

Applicants from other New England states may be eligible for a tuition rate equal to that of in-state tuition plus 50%. Students must meet the eligibility requirements for their state as well as the University, and must enroll in an approved regional program. Qualifying programs are those not offered on public campuses in a student's home state. For graduate programs eligible for the NERSP, please contact the Office of Graduate Admissions at 978-934-2390 or email [graduate\\_admissions@uml.edu](mailto:graduate_admissions@uml.edu)

### Proximity Rate Program\*

The Proximity Rate Program offers reduced tuition to Southern New Hampshire students living within 20 miles of the UMass Lowell campus. For additional information, please contact the Office of Graduate Admissions at 978-934-2390 or visit <http://www.uml.edu/thesolutioncenter/bill/tuition-fees/Graduate/>

\* Proximity and New England Regional Rates apply to graduate degree and certificate programs, **except** for courses offered through the Division of Online and Continuing Education.

**To qualify for these special rates you must be a citizen or permanent resident of the U.S.**

## Graduate Certificate Programs

### Not ready for a degree program?



UMass Lowell Graduate Certificates are designed to provide knowledge and expertise vital to today's changing and complex work place. In many cases, courses may be applied toward an appropriate master's degree program. Most certificates consist of four courses (a total of 12 graduate credits). Graduate Certificates are a great way to start or continue your graduate study.

#### WHO CAN APPLY?

- Holders of an appropriate bachelor's degree

#### HOW TO APPLY?

- Apply online or download an application at [www.uml.edu/grad](http://www.uml.edu/grad)
- Application Fee is \$50.00 for all applicants
- **NO Graduate Record Exam (GRE) Required**

#### Did You Know?

- Credits earned from a graduate certificate may be used toward a related graduate degree with the approval of the graduate program coordinator.
- Students who complete a graduate certificate with a cumulative GPA of 3.50 or better in a UMass Lowell graduate certificate program may be able to waive the GRE when applying to a related master's degree.

See the full list of certificate program descriptions, including course details at [www.uml.edu/Academics/Graduate-programs](http://www.uml.edu/Academics/Graduate-programs)

#### Gainful Employment Disclosure Information

Completion rates, median loan debts and program costs are outlined for each certificate program. Graduate certificate Gainful Employment Disclosure Information may be found at [www.uml.edu/Catalog/Graduate/Gainful-Employment-Grad.aspx](http://www.uml.edu/Catalog/Graduate/Gainful-Employment-Grad.aspx)



# GENERAL INFORMATION

See our Website at <http://continuinged.uml.edu> for detailed information.

You can also visit the Graduate Programs Website at [www.uml.edu/grad](http://www.uml.edu/grad)

### The Solution Center Hours

University Crossing, 220 Pawtucket Street, Suite 131  
Monday-Thursday: 8:30 am-6:30 pm  
Friday: 10:00 am-5:00 pm

### Division of Online and Continuing Education

Southwick 203, UML North  
Monday-Thursday: 8:30 am-7:00 pm  
Friday: 8:30 am-5:00 pm

### Holiday Hours and Special Hours

May 25 (University Closed)  
July 4 (University Closed)

**December 9, 2016:** Last day for students to complete work for incomplete Spring & Summer 2016 semester courses.

**Commencement: May 14, 2016**

### Phone Directory

Online and Continuing Education	(978) 934-2474
Bookstore — UML River Hawk Shop	(978) 934-2623
Faculty and Student Support Center	(978) 934-2474
Fax Number	(978) 934-4006
Registrar's Office	(978) 934-2550
Fax Number	(978) 934-4076
Graduate School of Education	(978) 934-4600
SiS and email HELP Desk	(978) 934-4357
Library — UML North (Alumni/Lydon)	(978) 934-3205
Library — UML South (O'Leary)	(978) 934-4550
UMass Lowell Main Number	(978) 934-4000
UMass Lowell Directions	(978) 934-5800
or <a href="http://www.uml.edu/maps">www.uml.edu/maps</a>	
Weather Cancellations	(978) 934-2121
The Solution Center	(978) 934-2000
(Financial Aid, Billing, and Registration)	

# Academic Information

The University of Massachusetts Lowell is accredited by the New England Association of Schools and Colleges, which accredits schools and colleges in the six New England states. Membership in the Association indicates that the institution has been evaluated carefully and meets the standards agreed upon by qualified educators. The Bachelor degree programs in Electronic Engineering Technology and Mechanical Engineering Technology are accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The Bachelor of Science in Business Administration (BSBA) is accredited by the AACSB — The International Association for Management Education.

### Catalog

Students should refer to the Division of Online and Continuing Education catalog for rules, regulations, program outlines, and course descriptions. The catalog is available online at <http://continuinged.uml.edu>.

### Admission into an Undergraduate Certificate or Degree Program

Students who have graduated from high school or who have earned a high school equivalency certificate are invited to apply for programs leading to a Certificate or an Associate's or Bachelor's degree. Please note: Students may apply to Bachelor's degree programs three years after completing their high school degrees. Applications for all programs are accepted on a rolling admissions basis. Please apply online at our website at <http://continuinged.uml.edu/apply.htm> for our degree and certificate programs. Note, there is a \$60 non-refundable application fee for admission into the undergraduate degree programs. There is no application fee for a certificate program.

### Admission into a Graduate Certificate or Degree Program

Students interested in applying for Graduate degree or certificate programs should access the application on the Graduate Admissions website at: [www.uml.edu/grad/](http://www.uml.edu/grad/). Students with Bachelor's degrees from accredited institutions may be eligible to enroll as non-degree students prior to formally matriculating into a Graduate degree or Certificate program. The non-degree form, including instructions, is available at: <http://www.uml.edu/thesolutionscenter/forms.aspx>.

### Undergraduate Degree Completion

Students who expect to complete their degree requirements in the 2015-2016 academic year must apply for graduation. Details on how to apply for graduation can be found at <http://continuinged.uml.edu/policies/graduation.cfm>.

### Undergraduate Certificate Completion

When a student completes the necessary courses for a certificate program, the student should complete and submit a Certificate Award Petition and exit survey to the Division of Online and Continuing Education. See the Online and Continuing Education website under Miscellaneous Forms at <http://continuinged.uml.edu>

**IMPORTANT: PLEASE NOTE:** Students must have applied for admission into a certificate program before completing the certificate requirement and the Certificate Completion Form. Failure to do so may affect the awarding of the certificate date and/or receipt of the certificate award. Certificates are awarded three times a year: Spring, Summer and Fall.

### Course Grades

Grades for the Spring semester will be available on SiS, the Inter-campus Student Information System.

# Faculty & Student Support Information

### Appointments with Faculty Program Coordinators

Students are encouraged to review their transcripts and their curriculum programs. Students may schedule appointments with Faculty Program Coordinators and Faculty and Student Support Specialists to discuss transcript issues, program degree requirements and other academic matters. See the front page of our website at <http://continuinged.uml.edu> to schedule an appointment with an advisor. The appointments may be held in person, online, by phone, or by Skype. Most appointments are held on UML North in the Faculty and Student Support Center. You may also email our Program Coordinators and Faculty Support Specialists.

# Registration Information

See Academic Calendar on page 23 for appropriate registration deadlines.

### SiS (Student Information System)

SiS is the online software system UMass Lowell students, faculty and staff use to input and access all types of student information.

### Assistance with SiS:

Online web tutorials and video screen casts for all student self-service features can be accessed by clicking on the 'Information For' link, and selecting Student at <http://SiS.uml.edu>.

### New students to the University must use the mail, fax, walk-in, or new Echo-sign options to register.

Once the new student registration has been processed by the Solution Center, the student will receive an email to his/her personal email account (if provided). The student should go to <http://SiS.uml.edu> and click on the 'Login information' link.

### Mail-In Registration:

Fill out the registration form and return it to:

1. The Solution Center  
220 Pawtucket Street, Suite 131  
Lowell, MA 01854-5129
2. For classroom location and other scheduling information, please visit the Student Information System (SiS).

### Fax-In Registration:

Fill out the registration form and fax it to (978) 934-2041.

### Email Registration:

Can be emailed to: [thesolutioncenter@uml.edu](mailto:thesolutioncenter@uml.edu)

**Walk-In Registration is held at the Solution Center, currently located at University Crossing, 220 Pawtucket Street, Suite 131, Lowell, MA 01854-5129.**

### Echo-Sign

Students can submit an electronic registration form by going to: [www.uml.edu/registrar/echosign.aspx](http://www.uml.edu/registrar/echosign.aspx).

Students are encouraged to use SiS, the Web-Based Self-Service System whenever possible. Students taking online courses must obtain a UML email address as well as a log-on password.

# Financial Information

Tuition is priced on the listed credit hour unless the contact hour is different. Tuition is then based on the listed contact hour. See information on Financial Aid and Scholarships on our website at <http://continuinged.uml.edu>.

### Tuition and Fee Information

	Per Credit Contact Hr.
Undergraduate Face-to-Face Tuition	\$340.00
Undergraduate Audit	\$340.00
Undergraduate Online	\$370.00
Undergraduate Online Audit	\$370.00
Graduate Online, On-Campus, and Off-Campus Courses and Audit (except M.B.A. Online and Education Courses)	\$570.00
Graduate Education Courses	\$470.00
M.B.A. Online Courses	\$630.00
Registration Fee per Term (non-refundable)	\$30.00
Late Fee for Non Payment	\$50.00
Fee for Undergraduate Degree application	\$60.00

**Please note:** Cost per credit includes access fee (parking after 2 pm and access to Blackboard).

**\*Note: Some tuitions may vary depending on customization and customer and program requirements.**

**Please note:** Graduate students will be assessed a "First-Year Student Services Fee" upon matriculation into a graduate degree or certificate program. Please see the Student Financial Services website at <http://www.uml.edu/Tuition-fees/> for more information.

Students who have checks returned due to insufficient funds will be charged a \$30.00 insufficient funds fee.

### Student E-Billing Information:

- Students have access to view their bills online at <http://www.uml.edu/thesolutioncenter/money/payment-options.aspx>.
- Students will receive an email notification to their UMass Lowell student email account (e.g., John\_Doe@student.uml.edu) when a new bill has been generated.

For more information please go to <http://www.uml.edu/>

[Tuition-fees/Billing-Payment-Information.aspx](http://www.uml.edu/Tuition-fees/Billing-Payment-Information.aspx)

### Payment Options

The University of Massachusetts Lowell is *no longer directly* accepting cash, credit cards or debit cards for payment of student tuition, and fees, room and board (if applicable). **(Credit cards not accepted over the phone or via the remit portion of the student invoice.)** The University has secured the services of TMS (Tuition Management Systems) to process all credit **card/debit card transactions**. TMS accepts MasterCard, VISA, Discover, American Express, and e-checks. There will be a 2.5% non-refundable convenience fee assessed to each credit card/debit card transaction. The following payment options are also available for paying a student's tuition and fee bill:

- Online: e-checks, credit card, bank check
- Mail: check, money order, bank check
- Monthly Payment Plan processed through TMS
- International Wire Transfers

### Overdue Accounts

Students will be permitted to attend class and to utilize facilities only after they have cleared all their financial obligations to the University. In addition, student transcripts and diplomas will not be released until all debts have been paid. All students are advised that the University uses the services of collection agencies authorized under the Commonwealth's Master Service Agreement. Students with a prior semester balance who are not enrolled for the current semester and are referred to a collection agency are held liable for all associated collection fees, which may be substantial.

### Directed Studies

Directed Studies, Departmental exams, Practicums, Internships, Applied Music Lessons, etc. are considered Special Programs and, as such, tuition remission, and waivers cannot be accepted.

### NOTE: Veterans' Information

We invite all Veterans to contact the Office of Veterans Services at 978-934-2461 or email: [Veterans@uml.edu](mailto:Veterans@uml.edu) for information on VA benefits and State Veterans Waivers. Waivers must be requested by students matriculated in an undergraduate degree program through the Office of Veterans Services. They are applicable to on campus courses only provided there is space available and there is a sufficient number of tuition paying students enrolled to bear the cost of instruction. Due to the high cost of online, blended, and off campus courses, there are no waivers available for these courses. There are no waivers for Directed Studies, Departmental Exams, Practicums and Internships. Merit and Need Based Assistance grants for online courses may be available to veterans who are presently enrolled in undergraduate degree and certificate programs. To qualify for both a tuition waiver and any merit or need-based assistance, students must be enrolled in a degree or certificate program and making satisfactory academic progress.

### International Students

The University of Massachusetts Lowell does not issue a student visa document (i.e., Form I-20 or Form DS-2019, etc.) to students for any Online and Continuing Education Programs. International students presently living in the U.S. who are registering for the Division of Online and Continuing Education classes must provide proof of non-immigrant status. Please submit a copy of: your current visa document (Form I-20, Form DS-2019, Form I-797, Employee Authorization Card, etc.); visa stamp; and I-94 card, <https://i94.cbp.dhs.gov/i94/> with your registration form. F-1 and J-1 students from another academic institution must obtain the consent of their U.S. sponsoring institution in order to enroll for courses at UMass Lowell. Such consent will be reviewed by the International Students & Scholars Office (ISSO) at UMass Lowell. These students will not be permitted to be full-time or degree seeking students at UMass Lowell while maintaining F-1 or J-1 student status from another academic institution. Students holding B-1 and B-2 status may not register for any academic classes. Students on F-2 spouses and minor children of a legal F-1 student may not engage in a full course of study, but may work towards completion of a degree while on part-time status. The ultimate responsibility to know and follow the U.S. Citizenship & Immigration Services regulations rests upon the students themselves. Please contact the International Students and Scholars Office at, [international@uml.edu](mailto:international@uml.edu), with any questions.

### Third-Party Payment

All students using company direct payment, military plans, state tuition waivers, or veterans' waivers must mail original authorization forms to UMass Lowell, Student Financial Services Office, University Crossing, 220 Pawtucket Street, Suite M30, Lowell, MA 01854-5110. Copies and/or faxes of tuition waivers cannot be honored. Students receiving company reimbursement must prepay their own tuition. The University does not honor company reimbursement contingent upon grades.

**Please note that waivers are not retroactive and do not cover registration and other fees.**



Academic Calendar

SUMMER 2016

Regular Online Classes (-031): May 16-August 6, 2016  
Accelerated Online Classes (-061): May 16-July 23, 2016

The Division of Online and Continuing Education offers students a variety of scheduling options.

- 1. Ten-week Face-to-Face and Online classes meet from May 16 through July 23.
- 2. Twelve-week Face-to-Face and Online classes meet from May 16 through August 6.
- 3. A number of courses meet one day a week spanning May 16 through August 6.
- 4. Eight-week Face-to-Face and Online classes meet from May 16 through July 9.
- 5. Six-week Face-to-Face classes meet from May 16 through June 27 and July 6 through August 16.

Summer Session I

May 16-June 27, 2016

Face-to-Face Classes begin on Monday, May 16.

M/W classes include 3 FRIDAYS: May 20, June 3 and June 17 at the regularly scheduled hours.

T/Th classes begin on Tuesday, May 17 and include 2 FRIDAYS: May 27 and June 10 at the regularly scheduled hours.

Final Examinations

M/W/Th 3-credit courses: Monday, June 27

M-F 4-credit courses: Thursday, June 23

M/W Classes: Wednesday, June 22

T/Th Classes: Thursday, June 23

Summer Session II

July 6-August 16, 2016

Face-to-Face Classes begin on Wednesday, July 6.

M/W classes begin on Wednesday, July 6 and include 3 FRIDAYS: July 8, July 22 and August 5 at the regularly scheduled hours.

T/Th Evening classes begin on Thursday, July 7 and include 3 FRIDAYS: July 15, July 29, and August 5 at the regularly scheduled hours.

Final Examinations

M/W/Th 3-credit courses: Monday, August 15

M-F 4-credit courses: Friday, August 12

M/W Evening Classes: Wednesday, August 10

T/Th Evening Classes: Friday, August 12

Add/Drop & Withdrawal with "W" notation

	Add*	Drop	Withdraw with "W" notation	
			Undergraduate	Graduate
<b>Summer I</b> 5/16-6/27 (Section -01X and -04X)	5/20	5/27	6/15	6/20
<b>Summer II</b> 7/6-8/16 (Section -02X and -04X)	7/12	7/19	7/29	8/5
<b>8-Week Online Courses</b> 5/16-7/9 (Section -080-084)	5/20	5/27	6/24	7/1
<b>8-Week Face to Face Courses</b> 5/16-7/9 (Section -085-089)	5/20	5/27	6/24	7/1
<b>Accelerated Online Courses (10-Week)</b> 5/16-7/23 (Section -06X)	5/20	5/27	7/8	7/15
<b>Accelerated Face to Face Courses (10-Week)</b> 5/16-7/23 (Section -05X)	5/20	5/27	7/8	7/15
<b>Full Term Online Courses (12 week)</b> 5/16-8/6 (Section -03X)	5/20	5/27	7/22	7/29
<b>Full Term Face to Face Courses (12 week)</b> 5/16-8/6 (Section -00x and -09x)	5/20	5/27	7/22	7/29

\*A permission number is required to add a course from 5/21 to 5/27 and 7/13 to 7/19. Add/Drops can be processed in SiS or The Solution Center Office, University Crossing, 220 Pawtucket Street, Suite 131, Lowell.

Changes from credit to audit and audit to credit status are limited to this two-week period.

Students withdrawing from any class can do so by using SiS, <http://sis.uml.edu>. Verbal messages to faculty and staff do not constitute official notification.

NOTE: Senior Citizens

Senior citizens (60 years or older) who are Massachusetts residents may attend on campus classes in the Division of Online and Continuing Education credit programs tuition-free provided that there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. Proof of Massachusetts residency (i.e. MA state taxes, mortgage statement, letter from Town or City Hall or voter's registration), birth date-copy of Massachusetts Driver's License and an "Application for Massachusetts Categorical Tuition Waiver" which can be found on the Solution Center Webpage under forms. This documentation must be provided every academic year at the time of registration. Waivers are not available for online, blended or off-campus courses or for Directed Studies, Departmental Exams, Practicums and Internships.

Refund Schedule for Tuition and Fees

Students who withdraw from the University or drop all of their courses during the add/drop period will receive a 100% adjustment to tuition and fees for the semester except for the following:

- 1) The Division of Online and Continuing Education \$30.00 non-refundable Registration Fee per term.
- 2) Students who are suspended or expelled for disciplinary reasons will forfeit all rights to a tuition and fee adjustment.
- 3) Any book voucher monies advanced to students and used at the bookstore. Students should contact the bookstore at (978) 934-2623 for the refund policy on books and materials purchased directly from them.
- 4) Residence hall charges and meal plan charges follow a different refund schedule. Students should contact the Residence Life Office at (978) 934-5115 for further assistance.

**Please note: There are no adjustments to tuition and fee charges if students withdraw or drop classes after the add/drop period of the academic semester.**

Student records will be cleared and appropriate refunds will be awarded only after outstanding University bills (library fines, parking fines, etc.) are paid and all University-owned property is returned. If debts remain unpaid, students' academic permanent records will not be released and students will not be readmitted to the University.

Direct Deposit Refunds

Great news! You can now have refunds from UMass Lowell deposited directly into your bank account. For detailed instructions, visit <http://www.uml.edu/thesolutioncenter/money/Refunds/directdeposit.aspx>. Scroll down and select Enroll in Direct Deposit in SiS.

Health Insurance

All matriculating students enrolled in 9 or more credits will be charged for health insurance. Online courses are not considered eligible credits. Students who have comparable health insurance may apply on SiS to waive the charge. Please see the Student Financial Services website at [www.uml.edu/thesolutioncenter/bill/health-insurance.aspx](http://www.uml.edu/thesolutioncenter/bill/health-insurance.aspx) for additional information. Please note that all students who withdraw from or drop all of their classes within the first 31 days (calendar days) of the academic semester are not allowed to be enrolled in the University student health

insurance plan. Students taking only online classes will **not** be eligible for the student insurance.

Financial Aid

Financial aid is available for students who qualify. Financial aid consists of grants, scholarships, loans, student employment, waivers, reimbursement programs, and other financing arrangements. Students must be matriculated in an eligible degree or certificate program and be enrolled in courses required for that program to receive financial aid. To apply for financial aid, students must complete the 2015-2016 Free Application for Federal Student Aid (FASFA) online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Financial aid is applied to students' charges following the end of the add/drop period. Students who withdraw from the University after receiving financial aid will be reviewed to determine the amount of financial aid the student earned prior to withdrawing. Students who withdraw may be required to return some or all financial aid. For more information about financial aid eligibility, please go to [www.uml.edu/financialaid/](http://www.uml.edu/financialaid/).

Correct Social Security Number/  
Tax Identification Number

The University of Massachusetts Lowell must obtain your correct social security number (SSN) to file certain information returns with the IRS as well as to furnish a statement to you. The returns the University must file contain information about qualified tuition and related expenses (Form 1098-T, Tuition Payments Statement). The information about your tuition will help to determine whether you, or the person who can claim you as a dependent, may take an education tax deduction.

**For additional information on Financial policies and procedures, see [www.uml.edu/Tuition-fees/](http://www.uml.edu/Tuition-fees/)**

Email

A significant number of important communications will be delivered to students via University email. Information about the availability of class schedules, course cancellations, grade reports, and financial awards that can be accessed using SiS, the Web-Based Self-Service, will be sent to students via email. UMass Lowell assigns UML email addresses to all students. Students should use their UML accounts with the @student.uml.edu suffix to ensure they receive important communications from the University. Please go to [www.uml.edu/student-life/email.aspx](http://www.uml.edu/student-life/email.aspx) and check the student email link.

Wait Listing

You may now put yourself on a wait list through SiS if the course you want is full. When you try to register for a closed course, the system will ask you if you want to be put on a wait list. If space becomes available in a course, the wait list function will add you into the class in the order of your request. Please note that you will receive an email at your UML email address if you are put into the closed course. Check your schedule in SiS to see if you are registered for the closed course. If you no longer wish to register for a course you are wait listed for, you must remove yourself from the wait list through SiS. If you do not remove yourself from the wait list, you run the risk of being registered for a course

and will be responsible for the grade received as well as the tuition and fees incurred. We also encourage you to register for a course that is open for enrollment, instead of using the wait list.

Emergency Contact Information & Notification System

As increased concerns regarding security, safety and campus emergencies of all types affect University campuses nationwide, UMass Lowell has initiated a program that requires students to provide and/or verify Emergency Contact Information on a regular basis. This information is used to contact designated individuals in the event of an emergency involving the student while on campus or when an emergency notification alert to advise our community is released.

When you first log into SiS this semester, you will notice an entry in "Your Holds Summary" indicating Emergency Contact Verification. This "Hold" will prevent all Registration/Add/Drop/ Swap a Class activity until you take action to verify your Emergency Contact Information. Release this hold by clicking on the hold and following the instructions. We encourage you to verify this information BEFORE you need to register for classes. For assistance, a help document has been posted on the SiS website.

Emergency Notification

Verify and update your account in the UML Emergency Notification System to get notified in the event of a campus emergency or crSiS at <http://www.uml.edu/myalert>

UCards/Student ID Cards

All students may request a UCard, but for most OCE students a UCard is not needed. OCE students that arrive before 2:00 pm will be charged a parking fee. The UCard primarily works as a student ID and an access card, but benefits also include the ability to load funds for meal and retail locations on campus, as well as printing. OCE students that have classes in labs secured by card access are required to have a UCard. Your instructor will let you know if you need a UCard to access a particular lab. For information on parking, please visit our website at [www.uml.edu/ucaps](http://www.uml.edu/ucaps).

**Note:** If you require a UCard, you will need to visit the UCAPS Office any time after you have registered for classes and after May 9th to have your photo taken and a UCard will be issued to you. UCards are good for life and the first card is free – if you require a replacement card the cost is \$20. Contact the UCAPS Office at (978) 934-2800 or email: [UCAPS@uml.edu](mailto:UCAPS@uml.edu) if you have any questions. UCAPS is located in University Crossing at 220 Pawtucket Street.

What is UPrint?

UPrint is a green initiative that is aimed to reduce paper waste by eliminating unwanted and excess printing. If you are an OCE student and you do not have a UCard, you may purchase a UPrint Card at either the North or South Campus Library. To take advantage of a \$15 printing credit per semester, please follow the instructions at [www.uml.edu/uprint](http://www.uml.edu/uprint).

Institutional Disclosure

The University is required to disclose the availability of various types of information related to Federal programs and mandates under the Higher Education Acts. This information is located on the UML web at: [http://continuinged.uml.edu/general/inst\\_disclosure.htm](http://continuinged.uml.edu/general/inst_disclosure.htm)

Students with Disabilities

Newly accepted students who are requesting an accommodation based on a disability should interview with Student Disability Services. Student Disability Services will assist in making an appropriate accommodation plan. This should be done **before** classes begin. These interviews are scheduled by emailing [disability@uml.edu](mailto:disability@uml.edu).

Prior to scheduling an Intake Interview, proper documentation must be provided to the Student Disability Services Office.

The University's Annual Campus Crime and Safety Report

Under the Regulations of the Safe and Drug-Free Schools and Communities Act and the Jeanne Clery Act (formerly the Campus Security Act), the University is required annually to distribute to all faculty, staff and students a copy of the Annual Crime Report and the University's Policies and Procedures related to alcohol, other drugs, and sexual assault. These regulations permit us to publish this report electronically, and the current report is available on the internet at <http://www.uml.edu/Police>.

Bookstore

UMass Lowell River Hawk Shop  
220 Pawtucket Street, (978) 934-2623

Students taking online courses can order books through the UMass Lowell River Hawk Shop.

Every effort has been made to ensure the accuracy of the information presented in this bulletin. However, Online and Continuing Education (OCE) reserves the right to implement new rules and regulations and to make changes of any nature in its program, calendar, procedures and standards, degree requirements, and academic schedules (including, without limitations, changes in course content and class schedules), locations, tuition, and fees. Whenever possible, appropriate notice of such changes will be given before they become effective. When changes are necessary, Online and Continuing Education exerts reasonable efforts to provide comparable or substantially equivalent instructional services and facilities for those originally designated. However, OCE assumes no liability for failure to deliver or for delay in delivering such services (including those in support of academic functions or student life) when the causes for such failure or delay are beyond the reasonable control of Online and Continuing Education – which causes include, without limitation, the following: power failure, fire, accident, natural disaster, work slowdown and strikes, loss of personnel, and acts of public authorities. In registering for courses, each student assumes full responsibility for knowledge of and compliance with the definitions, regulations, and procedures for the University as set forth in the appropriate publications and bulletins.

This newspaper is printed at no cost to the Commonwealth of Massachusetts. The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action University and does not discriminate in employment or access to programs or services on the basis of race, sex, sexual orientation, color, national origin, religion, handicap, or veteran's status and is in compliance with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act, 1990. Any inquiries and/or grievances may be referred to the Affirmative Action Officer, the Title IX Coordinator, the Disabilities Coordinator and/or to the Director, Office for Civil Rights, U.S. Department of Health and Human Services, Washington, D.C.

**Please note: UMass Lowell is a smoke- and tobacco-free campus.**



ATTENTION UNDERGRADUATE STUDENTS

COMPLETE SOME OF YOUR GEN ED OR CORE CURRICULUM REQUIREMENTS THIS SUMMER AT UMASS LOWELL!

A large selection of "Gen Ed" or Core Curriculum courses will be offered this summer, plus a wide variety of other courses that can be counted as free electives!

For more information and a complete list of the Gen Ed and Core Curriculum courses that will be offered this Summer, check out <http://continuinged.uml.edu> For additional information on UMass Lowell's General Education/Core Curriculum Requirements, please visit <http://www.uml.edu/Academics/undergraduate-programs/Gened/>

DO YOU STUDY AT ANOTHER COLLEGE OR UNIVERSITY?

You may be able to take a UMass Lowell course this Summer and transfer it into your program of study at another institution. Check with your college or university regarding acceptance of transfer credits from UMass Lowell prior to registering for your course.

To speak with one of our advisors about taking a course at UMass Lowell and counting it towards your degree at another college or university, call (978) 934-2474.

Book Your Stay or Your Next Event at UMass Lowell's Inn & Conference Center

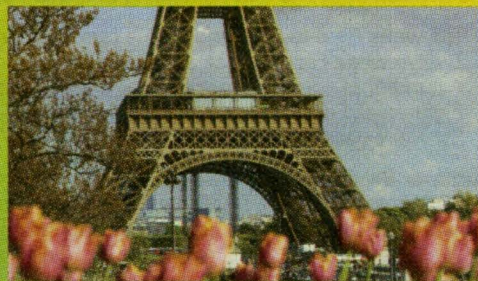


Located in the heart of scenic downtown Lowell and just minutes from the inter-sections of I-495, Route 3 and the Lowell Connector, UMass Lowell's Inn & Conference Center is the perfect destination for your special event or getaway.

For additional information, call 978-934-6920 or visit <http://www.uml.edu/icc>

INTERNATIONAL STUDY ABROAD

Attention Online and Continuing Education Students Interested in Study Abroad Programs



Now you can take a Faculty-Led Study Abroad course for personal interest, or as part of your degree program, with prior approval from your faculty program coordinator.

To Learn More About Faculty-Led Study Abroad Programs at UMass Lowell, visit <http://www.uml.edu/international-programs/>

Pursue a UMass Lowell Degree at NECC in Haverhill this Summer.

You can earn your Bachelor's Degree in Psychology, Criminal Justice, or Business Administration in Haverhill, Massachusetts.\*

UMass Lowell will offer the following courses at Northern Essex Community College in Haverhill, MA this Summer:

NECC SUMMER SESSION 2 | June 20th to August 11th

Criminal Justice

2534	CRIM.3870-HA1	Criminal Mind and Behavior	M/W 3:00-5:40 pm	3	P: CRIM.1010 or CRIM.2210	D. Carlin
2541	CRIM.3900-HA1	Criminal Justice Research Methods	M/W 6:30-9:10 pm	3	Criminal Justice Junior or Senior standing only	P. McCormack

Finance

3013	FINA.3010-HA1	Financial Management	T/Th 6:30-9:10 pm	3	P: ACCT.2010, ECON.2010, ECON.2020; COM filter courses, BSBA Major or Business Minor/BSIT/ASIT with 54+ credits	B. Bonghi
3018	FINA.3210-HA1	Investment and Portfolio Analysis	T/Th 6:30-9:10 pm	3	P: COM filter courses; BSBA or Business Minor; requires Logarithm calculator	A. Rehman

Marketing/Entrepreneurship

3064	MKTG.3130-HA1	Sales and Customer Relations	M/W 6:30-9:10 pm	3	P: MKTG.2010: COM filter	L. Durand
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Operations and Information Systems

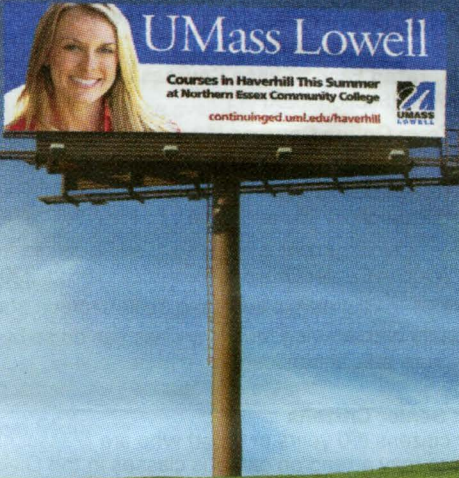
2791	POMS.2010-HA1	Managerial Decision Making	M/W 6:00-9:00 pm	3	P: ECON.2110 OR MATH.1830 OR MATH.2830	M. Vaid
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Psychology

2947	PSYC.3280-HA1	Dynamics of Interpersonal Relations	M/W 6:30-9:10 pm	3	P: PSYC.1010, Junior/Senior level	K. Butland
2952	PSYC.3510-HA1	Human Sexuality	T/Th 6:30-9:10 pm	3	P: PSYC.1010	J. Worthley
2958	PSYC.3750-HA1	Research III: Laboratory	M/W 3:00-5:40 pm	3	P: PSYC.3690 and PSYC.2690	M. Ryder
2962	PSYC.4740-HA1	Seminar in Developmental Psychology: Challenges of Adolescence	T/Th 3:00-5:40 pm	3	P: PSYC.2600 and PSYC.2690	J. Theriault

To schedule an appointment with an advisor in Haverhill, call (978) 934-2474. For more details, visit <http://continuinged.uml.edu/haverhill>

\*Students may have the option to complete some required courses online.



REGISTRATION FORM FOR COURSES

Registration form is for NEW UMass Lowell Online and Continuing Education students only. Current UML students should register online at <http://sis.uml.edu>.

Note: Please remember to fill in your work, home phone numbers and email address. This will allow us to reach you in case of class cancellations.

University of Massachusetts Lowell

Mail to University of Massachusetts Lowell, The Solution Center, University Crossing, 220 Pawtucket Street, Suite 131, Lowell, MA 01854-5129 OR FAX to: (978) 934-2041  
Email The Solution Center at [Thesolutioncenter@uml.edu](mailto:Thesolutioncenter@uml.edu)

PLEASE USE INK AND PRINT

CHECK APPROPRIATE REGISTRATION STATUS:

☐ Undergraduate Credit ☐ Graduate Credit ☐ Noncredit

Citizenship: ☐ Native or naturalized citizen ☐ Permanent resident (w/valid alien registration card, refugee, or asylum visa)

☐ Not a citizen of the US; Country of citizenship: \_\_\_\_\_

☐ Approved visa: H1\_\_\_\_ H4\_\_\_\_ J2\_\_\_\_ K-3\_\_\_\_ L1\_\_\_\_ L2\_\_\_\_ TN\_\_\_\_ TD\_\_\_\_

International students living in the US may take only one online course per semester.  
Contact International Students and Scholars Office at [ISSO@uml.edu](mailto:ISSO@uml.edu).

Student ID/SSN# (for new students only): \_\_\_\_\_

Name \_\_\_\_\_

Street & No. \_\_\_\_\_

City & State \_\_\_\_\_ Zip Code \_\_\_\_\_

Date \_\_\_\_\_

Gender ☐ M ☐ F Date of birth \_\_\_\_\_

Work phone \_\_\_\_\_ Home phone \_\_\_\_\_

Cell phone, for emergency purposes \_\_\_\_\_

Email \_\_\_\_\_

Please check one or more of the following groups in which you identify yourself:

☐ Asian ☐ Black or African American ☐ Native Hawaiian or Pacific Islander

☐ American Indian or Alaskan Native ☐ White ☐ Hispanic or Latino

Change of name or address since last registration? ☐ Yes ☐ No

Former name \_\_\_\_\_

Signature \_\_\_\_\_

COURSES FOR WHICH YOU ARE REGISTERING														
SIS Class No.	Course Number					Course Title					Credits/Contact Hrs.			If Full, Wait List?
						SUMMER I								
						SUMMER II								

Tuition and Fees	
Tuition	
Registration Fee (\$30 per Term)	
Total	\$

Please do not send payment. You will be billed for tuition and fees by the University.

Confirmation of your registration will be under your account at <http://sis.uml.edu>. (A user ID and password will be sent to you by mail upon receipt of your registration.)

Online Students: Go to <https://continuinged.uml.edu/login> one to two business days after registration in order to check your access.

Verification of Baccalaureate Degree:

Only for students who are not matriculated into a Graduate Program and are registering for Graduate courses. An unofficial transcript must be submitted within 30 days of registration.

Institution	Major	Degree Earned	Degree Date